

United Republic of Tanzania

NATIONAL SAMPLE CENSUS OF AGRICULTURE
2002/2003

Volume Vv: REGIONAL REPORT: **TABORA REGION**



Cattle Rearing



Fish Harvesting



Eggs Production



Maize Planting



Paddy Growing



Hand Cultivation



Indigenous Chicken



Irrigation Practice



Orange Marketing



Cassava Planting



Goat Rearing



United Republic of Tanzania



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OF AGRICULTURE
2002/2003**

VOLUME Vn: REGIONAL REPORT: TABORA REGION

*National Bureau of Statistics, Ministry of agriculture and Food Security,
Ministry of Water and Livestock Development, Ministry of Cooperatives and Marketing,
Presidents Office, Regional Administration and Local Government,
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ACRONYMS

<i>ASDP</i>	<i>Agricultural Sector Development Project</i>
<i>CSPro</i>	<i>Census and Survey Processing Program</i>
<i>DFID</i>	<i>Department For International Development</i>
<i>DIAS</i>	<i>District Integrated Agricultural Survey</i>
<i>DS</i>	<i>District Supervisor</i>
<i>EAS</i>	<i>Expanded Agricultural Survey</i>
<i>EAs</i>	<i>Enumeration Areas</i>
<i>EU</i>	<i>European Union</i>
<i>FE</i>	<i>Field Enumerator</i>
<i>GDP</i>	<i>Gross Domestic Product</i>
<i>Ha</i>	<i>Hectares</i>
<i>IAS</i>	<i>Integrated Agricultural Survey</i>
<i>ICR</i>	<i>Intelligent Character Recognition</i>
<i>IEC</i>	<i>Information, Education and Communication</i>
<i>JICA</i>	<i>Japanese International Cooperation Agency</i>
<i>LRS</i>	<i>Long Rainy Season,</i>
<i>MAFS</i>	<i>Ministry of Agriculture and Food Security</i>
<i>MCM</i>	<i>Ministry of Co-operatives and Marketing</i>
<i>MWLD</i>	<i>Ministry of Water and Livestock Development</i>
<i>NBS</i>	<i>National Bureau of Statistics</i>
<i>NGO</i>	<i>Non Governmental Organization</i>
<i>NMS</i>	<i>National Master Sample</i>
<i>NSCA</i>	<i>National Sample Census of Agriculture</i>
<i>NSGRP</i>	<i>National Strategy for Growth and Reduction of Poverty</i>
<i>PORALG</i>	<i>President's Office, Regional Administration and Local Government</i>
<i>PPS</i>	<i>Probability Proportional to Size</i>
<i>PSU</i>	<i>Primary Sampling Unit</i>
<i>RAAS</i>	<i>Rapid Appraisal Agricultural Survey</i>
<i>RS</i>	<i>Regional Supervisor</i>
<i>RSM</i>	<i>Regional Statistical Manager</i>
<i>SAC</i>	<i>Scotts Agriculture Consultancy Ltd</i>
<i>SPSS</i>	<i>Statistical Package for Social Science</i>
<i>SRS</i>	<i>Short Rainy Season</i>
<i>TOT</i>	<i>Training of Trainers</i>
<i>ULG</i>	<i>Ultek Laurence Gould</i>
<i>UNDP</i>	<i>United Nations Development Programme</i>
<i>UNFAO</i>	<i>United Nations Food and Agriculture Organization</i>
<i>VPO</i>	<i>Vice President Office</i>

PREFACE

At the end of the 2002/03 Agriculture Year, the National Bureau of Statistics, Tanzania Mainland and the Office of the Chief Government Statistician, Tanzania Zanzibar in collaboration with the Ministries of Agriculture and Food Security; Water and Livestock Development; Cooperatives and Marketing as well as the President's Office, Regional Administration and Local Government (PORALG) conducted the Agriculture Sample Census. This is the third Agriculture Census to be carried out in Tanzania, the first one was conducted in 1971/72, the second in 1993/94 and 1994/95 (data on household characteristics and livestock count were collected in 1993/1994 while data on crop area and production were collected in 1994/95).

It is considered that this census is one of the largest to be carried out in Africa and indeed in many other countries of the world. The census collected detailed data on crop production, crop marketing, crop storage, livestock production, fish farming, tree farming, access to infrastructures and services and poverty indicators.

In addition to this, the census was large in its coverage as it provides data that can be disaggregated at district level and thus allow comparisons with the 1998/99 District Integrated Agricultural Survey. The census covered smallholders in rural areas only and large scale farms.

This report presents Tabora region data disaggregated to district level. Due to numerous variables collected, the analysis is based on the most important smallholder variables. More variables can be found in the table of results annex.

The extensive nature of the census in relation to its scope and coverage is a result of the increasing demand for more detailed information to assist in the proper planning of this sector and in the administrative decentralization of planning to district level. It is hoped that this report will provide new insights for planners, policy makers, researchers and others involved in the agricultural sector in order to improve the prevailing conditions faced by crop producers and livestock keepers in the country.

On behalf of the Government of Tanzania, I wish to express my appreciation for the financial support provided by the development partners, in particular, the European Union as well as DFID, UNDP, Japanese Government, JICA and others who contributed through the pool fund mechanism.

Special thanks should go to all those who in one-way or the other contributed to the success of the survey. In particular, I would like to mention the enormous effort made by the Planning Group composed of professionals from the Agriculture Statistics Department of the National Bureau of Statistics (NBS), the Office of the Chief Government Statistician, Zanzibar (OCGS) and the Statistics Unit of the Ministry of Agriculture and Food Security (MAFS) with technical assistance provided by Ultec Lawrence Gould (ULG), Scotts Agriculture Consultancy Ltd and the Food and Agriculture Organisation of the United Nations (FAO).

Finally, let me extend my sincere gratitude to all professional staff of the National Bureau of Statistics and Office of the Chief Government Statistician, the sector Ministries of Agriculture and PORALG, the Consultants as well as Regional and District Supervisors and field enumerators for their commendable work. I am also indebted to the respondents, particularly the heads of households, for spending much of their valuable time in providing data and all necessary information during enumeration. Certainly without their dedication, the census would not have been successful.

Albina A. Chuwa
Director General, National Bureau of Statistics

EXECUTIVE SUMMARY

The executive summary highlights the main survey results obtained during the National Sample Census of Agriculture 2002/03. This report covers small-scale agriculture households in rural areas of Tabora region who were selected using statistical sampling techniques. The results in the report do not cover urban areas and large-scale farmers.

The highlights describe the important findings on agricultural production, productivity, husbandry, access to resources, levels of involvement in agricultural related activities and poverty in Tabora region. Included are activities' indicators for one to get an overview, at regional level, of the rural agricultural households and their levels of involvement in agricultural related activities.

i) Household Characteristics

The number of agricultural households in Tabora region were 235,917 out of which 148,046 (62.8%) were involved in growing crops only, 296 (0.1%) rearing livestock only, and 87,575 (37.1%) were involved in crop production as well as livestock keeping. In summary, Tabora region had 235,621 households involved in crop production and 87,871 involved in livestock production.

Most of the agricultural households ranked annual crop farming as an activity that provides most of their cash income followed by off farm income, tree/forest resources, livestock keeping/herding ,permanent crop farming, remittances and fishing/hunting and gathering.

The region had a literacy rate of 52.5 percent. The highest literacy rate was in Tabora Urban district (67.4%) followed by Urambo district (56.0%) and Sikonge district (55.7%). Igunga, Uyui and Nzega districts had the lowest literacy rates of 53.3 percent, 51.8 percent and 46.0 percent respectively. The literacy rate for the heads of households in the region was 58.9 percent.

The number of heads of agricultural households with formal education in Tabora region was 135,084 (57.3%), those without formal education were 97,767 (41.4%) and those with only adult education were 3,066 (1.3%). The majority of heads of agricultural households (54%) had primary level education whereas only 3 percent had higher than post primary level education.

In Tabora region, of the households with at least one household member engaged in off-farm income generating activity, 117,453 household members (50%) had only one member engaged in an off-farm income generating activity, 52,284 (22%) had two members involved in off-farm income generating activities and 37,162 (16%) had more than two members involved in off-farm income generating activities.

ii) Crop Production**▪ Land Area**

The total area of land available to smallholders was 899,225 ha. The regional average land area utilised for crop production per crop growing household was only 2.6 ha. This figure is slightly above the national average of 2.0 hectares.

- **Planted Area**

The area planted with annual crops and vegetables was 532,615 hectares. The area planted with permanent crops was 9,929 hectares (1.8% of the total planted area).

An estimated area of 347,455 ha (65.2% of the total planted area with annual and vegetable crops) was with cereals, followed by 69,862 hectares (13.1%) of oil seeds, 54,948 ha (10.3%) of cash crops, 31,535 ha (5.9%) of root and tuber crops, 25,911 ha (4.9%) of pulses and 2,904 ha (0.5%) of fruits and vegetables.

- **Maize**

Maize was the dominant annual crop grown in Tabora region and it had a planted area 3.4 times greater than groundnuts, which had the second largest planted area. The area planted with maize constitutes 44 percent of the total area planted with annual crops. Other crops in order of their importance (based on area planted) were paddy, sorghum, tobacco, cotton, cassava, beans, sweet potatoes, bulrush millet, finger millet, simsim and sunflower.

There was 62 percent decrease in maize production in 1996/97 followed by a 36 percent increase in maize production the following year (1997/98). The total production of maize in 2002/03 was 143,122 tonnes. The average area planted with maize per household ranged from 0.8 hectares in Nzega and Tabora Urban to 1.3 hectares in Igunga District. Igunga district had the largest planted area for maize (56,579 ha) followed by Nzega (52,986 ha), Uyui (46,418 ha), Urambo (46,076 ha), Sikonge (22,958 ha) and Tabora (7,844 ha).

- **Paddy**

Paddy was the second most important cereal crop in the region in terms of planted area. The number of households that grew paddy in Tabora region during the long rainy season was 92,037. This represented 39 percent of the total crop growing households in Tabora Region in the long rainy season.

- **Cassava**

The area planted with cassava was larger than that of any other root and tuber crop in Tabora region accounted for 4 percent of the total area planted with annual crops and vegetables and accounted for 68 percent of the area planted with roots and tubers.

- **Fruit and Vegetables**

The total production of fruit and vegetables was 5,847 tonnes. The most cultivated fruit and vegetable crop was onions with a production of 2,550 tonnes (44% of the total fruits and vegetables produced) followed by tomatoes 2,522 tonnes (43%). The production of the other fruit and vegetable crops was relatively small.

- **Permanent Crops**

The smallholders' planted area with permanent crops was 9,929 hectares which was 1.9 percent of the area planted with crops in the region. The most important permanent crop was mango which accounted for 38 percent of the total area planted with permanent crops followed by palm oil (22%), banana (16%) and pawpaw (7%).

- **Improved Seeds**

The planted area using improved seeds was 88,125 ha which represented 17 percent of the total area planted with annual crops and vegetables.

- **Use of Fertilizers**

Most annual crop growing households did not use any fertilisers. The area planted without fertiliser for annual crops was 352,800 hectares representing 66 percent of the total area planted with annual crops. Of the planted area with fertiliser application, farm yard manure was applied to 101,423 ha which represented 56% of the planted area applied with fertilisers. This was followed by inorganic fertilizers (64,675 ha, 36%). Compost manure was used on a small area which represented only 8 percent of the area planted with fertilizers.

- **Irrigation**

In Tabora region, the area of annual crops and vegetables under irrigation was 34,866 ha representing 7 percent of the total planted area.

- **Crop Storage**

There were 217,899 crop growing households (92.4% of the total crop growing households) that reported storing various agricultural products in the region.

The most important stored crop was maize with 206,605 households storing 28,060 tonnes as of 1st January 2004. This was followed by paddy (76,850 households and 11,758 tonnes), groundnuts /bambara nuts (111,290 households and 6,695 tonnes) and sorghum and millet (21,828 households and 6,195 tonnes). The rest of the crops were stored in very small amounts.

- **Crop Marketing**

The number of households that reported selling crop was 131,403 which represent 55.7 percent of the total number of crop growing households. The percent of crop growing households selling crops was highest in Urambo (80.3%) followed by Sikonge (62.2%), Uyui (53.0%), Igunga (47.9%), Tabora Urban (45.5%) and Nzega (42.1%).

- **Agricultural Credit**

In Tabora region, few agricultural households (25,655, 10.9%) accessed credit, out of which 24,679 (96%) were male-headed households and 977 (4%) were female headed households. In Nzega, Igunga and Urambo districts only male headed households got credit for agriculture purposes, whereas in Sikonge and Tabora Urban both male and female headed households accessed credit.

- **Crop Extension Services**

The number of agricultural households that received crop extension was 62,956 (27% of total crop growing households in the region). Some districts have more access to extension services than others (Chart 3.108). Tabora Urban had a relatively high proportion of households that received crop extension messages (73%), followed by Uyui (30%), Sikonge (27%), Urambo (25%), Nzega (24%) and Igunga (19%).

- **Soil Erosion and Water Harvesting Facilities**

The number of agricultural households that reported the presence of soil erosion and water harvesting facilities on their farms was 5,399. This number represented 2.3 percent of total number of agricultural households in the region. The proportion of farmers with soil erosion control and water harvesting facilities was highest in Tabora Urban District (7.1%) followed by Uyui (4.9%), Nzega (2.5%), Urambo (1.8%), Sikonge (1.8%) and Igunga (0.2%).

iii) Livestock and Poultry Production**▪ Cattle**

The total number of cattle in the region was 1,568,691. Cattle were the dominant livestock type in the region followed by goats, sheep and pigs. The region had 9.1 percent of the total cattle population on Tanzanian Mainland. The number of indigenous cattle was 1,566,169 head (98.8% of the total number of cattle in the region), 1,851 (0.12 %) were dairy breeds and only 671 (0.04 %) were beef breeds.

▪ Goats

The number of goat-rearing-households in the region was 65,167 (27.6 % of all agricultural households) with a total of 718,996 goats giving an average of 11 head of goats per goat-rearing-households.

▪ Sheep

The number of sheep-rearing households was 28,126 (12% of all agricultural households) with a total of 235,213 sheep giving an average of 8 heads of sheep per sheep-rearing household.

▪ Pigs

The number of pig-rearing households in the region was 2,614 (1.2% of the total agricultural households) rearing about 6,286 pigs. This gives an average of 2 pigs per pig-rearing household.

▪ Chicken

The number of households keeping chickens was 168,339 raising 2,507,469 chickens. This gives an average of 15 chickens per chicken-rearing household. In terms of total number of chickens in the country Tabora ranked fourth out of the 21 Mainland regions.

▪ Use of Draft Power

The region had 370,495 oxen and they were found in all districts as follows: Igunga (162,466), Nzega (120,742), Uyui (42,341), Urambo (25,202), Sikonge (15,992) and Tabora Urban (3,752). Tabora region has 6 percent of the total 4,195,100 head of oxen found on the Mainland and were used to cultivate 223,878 hectares of land.

▪ Fish Farming

The number of households involved in fish farming was 222 (0.1 percent of the total agricultural households in the region). Sikonge and Uyui were the leading districts each with 98 agricultural households involved in fish farming (44%) followed by Tabora Urban 26 (2%). Fish farming was not practiced in Nzega, Igunga and Urambo districts.

iv) Poverty Indicators**▪ Availability of Toilets**

It was estimated that 81.2 percent of all rural agricultural households used the traditional pit latrines, 1.0 percent used flush toilets and 0.8 percent used improved pit latrines. The remaining 0.1 percent of households had other unspecified types of toilets. Households with no toilet facilities represented 16.9 percent of the total agriculture households in the region.

▪ Household Assets

Out of all assets bicycle were owned by most households (69.7% of households) followed by radio (53.7%), iron (17.8%), wheelbarrow (5.4%), vehicle (1.4%), mobile phone (1.0%), television/video (0.9 and landline phone (0.2%).

- **Source of Lighting Energy**

Wick lamp was the most common source of lighting energy in the region. About 84 percent of the total rural households used this source of energy followed by hurricane lamp (10.1%), pressure lamp (3.4%), firewood (2.0%), mains electricity (0.5%), candle (0.2%), solar (0.15%), and gas or biogas (0.06%).

- **Energy for Cooking**

The most prevalent source of energy for cooking was firewood, which was used by 94.8 percent of all rural agricultural households. The second most common source of energy for cooking was charcoal (2.7%). The rest of energy sources accounted for 2.9 percent. These were paraffin/kerosene (1.2%), crop residues (0.8%), bottled gas (0.2%), livestock dung (0.13%), mains electricity (0.11%), solar (0.06%).

- **Roofing Materials**

The most used roofing material (for the main dwelling) was grass and/or leaves and it was used by 70.1 percent of the rural agricultural households followed by grass/mud (14.9%). This was closely followed by iron sheets (13.8%). Other roofing materials are tiles (0.6%), asbestos (0.3%), concrete (0.1%) and others (0.3%).

- **Number of Meals per Day**

About 58.2 percent of the holders in the region took three meals per day, 37.7 percent took two meals, 3.2 percent took one meal and 0.9 percent took four meals.

- **Food Security**

Households which had never experienced food shortage represented 44.8 percent of the total number of agriculture households in the region. Households which seldom had problems in satisfying their food needs represented 32.4 percent and the households which were often faced with food shortage represented 8.7 percent. Those with little problems represented 7.2 percent and whilst about 6.9 percent of agriculture households always faced food shortages problems.

- **Main Source of Cash Income**

Selling of food crops was the main cash income earning activity reported by 22.8 percent of all rural agricultural households. The second main cash income earning activity was casual labor (20.9%) followed by selling of cash crops (16.0%), businesses (11.0%), sale of livestock (10.3%) and sale of forest products (7.5%). Other income earning activities were cash remittances (5.0%), employment (2.2%), sale of livestock products (1.1%) and fishing (0.2%).

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1. BACKGROUND INFORMATION

1.1 Introduction

This part of the report presents a brief description of the region by providing information on geographical location, land area, climate, administrative set up, population and socio-economic indicators. The information aims at providing the user with a general understanding of the region and its resources.

1.2 Geographical Location and Boundaries

Tabora region is situated at the Midwest part of Tanzania between 4⁰ and 7⁰degrees below the Equator and 31⁰ – 43⁰ degrees East of the Greenwich Meridian. The region lies on the central plateau whereby in the north east it shares the border with Shinyanga region, on the western side it borders Kigoma while in the south it shares the border with Rukwa and Mbeya regions.

The region comprises six districts of Nzega, Igunga, Uyui, Urambo, Sikonge, and Tabora Urban. The region headquarters is located in Tabora Urban.

1.3 Land Area

The region has an area of 76,151 square kilometers, of which 194.3 square kilometers (1,943,280 ha) are arable land.

1.4 Climate

1.4.1 Temperature

The dominant climate is warm with temperatures reaching the peak during September and October just before the long rainy season starts. The Central Plateau has the average temperature of 23⁰C with the minimum temperature of 17⁰C and maximum temperature of 28⁰C.

1.4.2 Rainfall

The region has one rainy season, the long rainy seasons. The season falls almost entirely between November and May. The total annual precipitation decreases from West to East. In the west the rainfall total over 1,000mm while in the East it drops to 700mm or less

1.5 Population

According to the 2002 Population and Housing Census, there were 1,717,908 inhabitants in Tabora region. The population of Tabora region ranked 7th out of the 21 regions on Tanzania Mainland.

1.6 Socio - Economic Indicators

The regional Gross Domestic Product (GDP) at current prices for the year 1998 was estimated to be TShs 196,803 million with a per capita income of 151,208 shillings.

Tabora region is famous for forestry industry and game reserves. The region has 34,698 square kilometers of forestry reserves and 17,122 square kilometers of game reserves.

The region is also famous for producing both food and cash crops. The main food crops produced in Tabora region include: maize, paddy, sorghum and finger millet. The main cash crops include cotton and tobacco. Livestock keeping is also a very important economic activity. The main livestock raised are cattle, goats and sheep.

2. INTRODUCTION

This part of the report provides the technical and operational description of the National Sample Census of Agriculture (NSCA), carried out in the rural areas of Tanzania Mainland and Zanzibar during the 2002/03 agricultural year. It details the background and the rationale for carrying out the NSCA in 2002/03 agricultural year. It also explains the sampling procedures, designing and implementation of the data processing system.

2.1 The Rationale for Conducting the National Sample Census of Agriculture

In 2003, the Government of Tanzania launched the Agricultural Sample Census as an important part of the Poverty Monitoring Master Plan which supports the production of statistics for advocacy of effective public policy, including poverty reduction, access to services, gender, as well as the standard crop production data normally collected in an agriculture census. The census is intended to fill the information gap and support planning and policy formulation by high level decision making bodies. It is also meant to provide critical benchmark data for monitoring Agriculture Sector Development Programme (ASDP) and other agriculture and rural development programs as well as prioritising specific interventions of most agriculture and rural development programs.

Following the decentralisation of the Government's administration and planning functions, there has been a pressing need for agriculture and rural development data disaggregated at regional and district levels. The provision of district level estimates will provide essential baseline information on the state of agriculture and support decision making by the Local Government Authorities in the design of District Agricultural Development and Investment Projects (DADIPS). The increase in investment is an essential element in the national strategy for growth and reduction of poverty.

This report (Volume V) is among the 21 regional reports for the mainland. Other Census reports include the Technical Report (Volume I), crop sector at national and regional levels including Zanzibar estimates (Volume II), Livestock Report (Volume III), Smallholder Household Characteristics and Access to Natural Resources Report (Volume IV), 21 Regional Reports for the Mainland (Volume V), Large Scale Farms Report (Volume VI) and a separate report for Zanzibar (Volume VII). In order to address the specific issue of gender, a separate thematic report on gender has been published. Other thematic reports will be produced depending on the demand and availability of funds. In addition to these reports two dissemination applications have been produced to allow users to create their own tabulations, charts and maps.

The report is divided into five main sections: Background Information, Introduction, Results, Evaluation and Conclusion and Appendices. The definitions relating to all aspects of this report can be found in the questionnaire (Appendix III).

2.2 Census Objectives

The 2003 Agriculture Sample Census was designed to meet the data needs of a wide range of users down to district level including policy makers at local, regional and national levels, rural development agencies, funding institutions, researchers, Non government Organisations (NGOs), farmer organisations, etc. As a result, the dataset is both more numerous in its sample and detailed in its scope compared to previous censuses and surveys. To date this is the most detailed Agricultural Census carried out in Africa. The census was carried out in order to:

- Identify structural changes if any, in the size of farm household holdings, crop and livestock production, farm input and implement use. It also seeks to determine if there are any improvements in rural infrastructure and in the level of agriculture household living conditions;

- Provide benchmark data on productivity, production and agricultural practices in relation to policies and interventions promoted by the Ministry of Agriculture and Food Security and other stake holders.
- Establish baseline data for the measurement of the impact of high level objectives of the Agriculture Sector Development Programme (ASDP), National Strategy for Growth and Reduction of Poverty (NSGRP) and other rural development programs and projects.
- Obtain benchmark data that will be used to address specific issues such as: food security, rural poverty, gender, agro-processing, marketing, service delivery, etc.

2.3 Census Coverage and Scope

The census was conducted for both large and small scale farms. The National Sample Census of Agriculture covered a total of 3,221 selected rural villages of Tanzania Mainland out of which 215 villages were from Tanga region.

The census covered agriculture in detail as well as many other aspects of rural development and was conducted using three types of questionnaires:

- Small scale farm questionnaire
- Community level questionnaire
- Large scale farm questionnaire

The small scale farm questionnaire was the main census instrument and it includes questions related to crop and livestock production and practices; population demographics; access to services, resources and infrastructure; issues on poverty, gender and subsistence versus profit making production units. The main sections covered are as follows:

- Identification (i.e. region, district, ward and village)
- Household and holding characteristics
- Household information
- Land ownership/tenure
- Land use
- Access and use of resources
- Crop and vegetable production
- Agro processing and by-Products
- Crop storage and marketing
- On-farm investment
- Access to farm inputs and implements
- Use of credit for agricultural purposes
- Tree farming/agro-forestry
- Crop extension services
- Livelihood constraints
- Animal contribution to crop production
- Livestock
- Livestock products
- Fish farming
- Livestock extension
- Labour use

- Access to infrastructure and other services
- Household facilities

The community level questionnaire was designed to collect village level data such as access and use of common resources, community tree plantation and seasonal farm gate prices.

The large scale farm questionnaire was administered to large scale farms that were either privately or corporately managed. There will be a national report on large scale farming on Tanzania Mainland.

2.4 Legal Authority of the National Sample Census of Agriculture

The NSCA 2002/03 was conducted under the legal authority of the 2000 National Bureau of Statistics Act which, among other things, makes data collected from individuals strictly confidential and to be used for statistical purposes only.

2.5 Reference Period

Two types of reference periods were used namely the agricultural year and the reference date for livestock enumeration. The agricultural year 2002/03 (that is October 2002 to September 2003) was used for the data items that are related to crop production. The reference date of enumeration for livestock and poultry count was 1st October 2003.

2.6 Census Methodology

The main focus at all stages of the census execution was on data quality and this is emphasised in this section. The main activities undertaken include:

- Census organisation
- Tabulation plan preparation
- Sample design
- Design of census questionnaires and other instruments.
- Field pretesting of the census instruments
- Training of trainers, supervisors and enumerators
- Information Education and Communication (IEC) campaign
- Data Collection
- Field supervision and consistency checks
- Data processing:
 - Scanning
 - ICR extraction of data
 - Structure formatting application
 - Batch validation application
 - Manual data entry application
 - Tabulation preparation using SPSS
- Table formatting and charts using Excel, map generation using ArcView and Freehand.
- Report preparation using Word and Excel.

2.6.1 Census Organization

The Census was conducted by the National Bureau of Statistics in collaboration with the sector ministries of agriculture, and the Office of the Chief Government Statistician in Zanzibar. At the national level the Census was headed by the
Tanzania Agriculture Sample Census

Director General of the National Bureau of Statistics with assistance from the Director of Economic Statistics. The Planning Group, made up of staff from the National Bureau of Statistics, Department of Agricultural Statistics and three representatives from the Ministry of Agriculture and Food Security (Department of Policy and Planning), oversaw the overall operational aspects of the Census. At the regional level, implementation of census activities was overseen by the Regional Statistical Officer of NBS and the Regional Agriculture Supervisor from the Ministry of Agriculture and Food Security. At the District level, two supervisors from the President's Office, Regional Administration and Local Government (PORALG), managed the enumerators who also came from the same ministry.

Members of the Planning Group had a minimum qualification of a bachelor degree, the regional supervisors were either agricultural economists, statisticians or statistical officers. The district supervisors and enumerators had diploma level qualifications in agriculture.

The Census and Surveys Technical Working Group provided support in sourcing financing, approving budget allocations and technical assistance inputs as well as monitoring the progress of the census. A Technical Committee for the census was established with members from key stakeholder organisations (i.e. NBS, sector ministries of agriculture, President's Office, Planning and Privatization (POPP), PORALG, University of Dar es Salaam (UDSM), Tanzania Food and Nutrition Centre (TFNC) and the Office of Chief Government Statistician (OCGS) in Zanzibar). The main function of the committee was to approve the proposed instruments and procedures developed by the Planning Group. It also approved the tabulations and analytical reports prepared from the Census data.

2.6.2 Tabulation Plan

The tabulation plan was developed following three user group workshops and thus reflects the information needs of the end users. It took into consideration the tabulations from previous census and surveys to allow trend analysis and comparisons.

2.6.3 Sample Design

The Mainland sample consisted of 3,221 villages. These villages were drawn from the National Master Sample (NMS) developed by the National Bureau of Statistics (NBS) to serve as a national framework for the conduct of household based surveys in the country. The National Master Sample was developed from the 2002 Population and Housing Census. In most cases, within each selected village, data was collected from a sub-sample of fifteen agricultural households. In few large

villages thirty households were selected. The total Mainland sample was 48,315 agricultural households. In Zanzibar a total of 317 EAs were selected and 4,755 agricultural households were covered. Nationwide, all regions and districts were sampled with the exception of three urban districts (two from Mainland and one from Zanzibar).

In both Mainland and Zanzibar a stratified two stage sample was used. In the first stage, villages/enumeration areas (EAs) were selected with probability proportional to the number of villages in each district. In the second stage, 15 households were selected from a list of farming households in each Village/EA using systematic random sampling. Table 2.1 gives the sample size of households, villages and districts for Tanzania Mainland and Zanzibar.

Table 2.1: Census Sample Size

Number of	Mainland	Zanzibar	Total
Households	48,315	4,755	53,070
Villages/Eas	3,221	317	3,539
Districts	117	9	126
Regions	21	5	26

2.6.4 Questionnaire Design and Other Census Instruments

The census questionnaires were designed following user/producer meetings to ensure that the information collected was in line with their data needs. Several features were incorporated into the design of the questionnaire to increase the accuracy of the data:

- Where feasible all variables were extensively coded to reduce post enumeration coding error.
- The definitions for each section were printed on the opposite page so that the enumerator could easily refer to the instructions whilst interviewing the farmer.
- The responses to all questions were placed in boxes printed on the questionnaire, with one box per character. This feature made it possible to use scanning and ICR technologies for data entry.
- Skip patterns were used to avoid asking unnecessary questions
- Each section was clearly numbered, which facilitated the use of skip patterns and provided a reference for data type coding for the programming of CSPro, SPSS and the dissemination applications.

Besides the questionnaires, there were other instruments used:

- Village listing forms that were used for listing households in the villages and from these list a systematic sample of 15 agricultural households were selected from each village.
- Training manual which was used by the trainers for the cascade/pyramid training of supervisors and enumerators. This manual was trainers guiding document on the procedures to follow during the training
- Enumerator Instruction Manual which was used as reference material.

2.6.5 Field Pre-Testing of the Census Instruments

The Questionnaire was pre-tested in five locations (Arusha, Dodoma, Tanga, Unguja and Pemba). This was done purposely to test the wording, flow and relevance of the questions and to finalise crop lists, questionnaire coding and manuals. In addition to this, several data collection methodologies had to be finalised, namely, livestock numbers in pastoralist communities, cut flower production, mixed cropping, use of percentages in the questionnaire and finalising skip patterns and documenting consistency checks.

2.6.6 Training of Trainers, Supervisors and Enumerators

Cascade/pyramid training techniques were employed to maintain statistical standards. The top level training was provided to 66 national and regional supervisors (3 per region plus Zanzibar). The trainers were members of the Planning Group and the trainees were from the National Bureau of Statistics and the sector ministries of agriculture. The second level training was for the district supervisors and enumerators. This training was conducted in the regions. In each region three training sessions were conducted for the district supervisors and enumerators. In addition to training in field level Census methodology and definitions, emphasis was placed on training the enumerators and supervisors in consistency checking. Tests were given to the enumerators and supervisors and the best 50 percent of the trainees were selected to administer the smallholder and community level questionnaires. This increased the number of interviews per enumerator but it also released finance to increase the number of supervisors and hence the Supervisor Enumerator Ratio. The household listing exercise was carried out by all trained enumerators.

2.6.7 Information, Education and Communication (IEC) Campaign

Information, Education and Communication (IEC) is an important aspect of any census/survey undertaking. This is due to the fact that inadequately informed and hence uncooperative citizens may jeopardize the entire census/survey. As far as the

2002/03 Agricultural Sample Census was concerned, the main objective of the IEC program was to sensitize and mobilize Tanzanians to support, cooperate and participate in the census exercise.

Radio, television, newspapers, leaflets, t-shirts and caps were used to publicise the Sample Census. T-shirts and caps were used by the field staff and the village chairmen as official uniforms during the field work. The village chairmen helped to locate the selected households.

2.6.8 Household Listing

The household listing exercise was done in seven days. During the listing exercise, forms ACLF1 and ACLF2 were administered. The information collected included the number of fields operated by the household, the number of different types of livestock and poultry. This information was used to determine the agricultural households. From the list of agricultural households, 15 households were selected for the interview. The selection was done using the Random Number Table.

2.6.9 Data Collection

Data collection activities for the 2002/2003 Agricultural Sample Census took three months from January to March 2004. The data collection methods used during the census were by interview and no physical measurements, e.g., crop cutting and field area measurement were taken. Field work was monitored by a hierarchical system of supervisors at the top of which was the Mobile Response Team followed by the national, regional, and district supervisors.

The Mobile Response Team consisted of three principal supervisors who provided overall direction to the field operation and responded to queries arising outside the scope of the training exercise. The mobile response team consisted of the Manager of Agriculture Statistics Department, Long-term Consultant and Desk Officer for the Census. Decisions made on definitions and procedures were then communicated back to all enumerators via the national, regional and district supervisors.

District supervision and enumeration were done by staff from the President's Office, Regional Administration and Local Government (PORALG). National and regional supervisions were provided by senior staff of the National Bureau of Statistics and the sector ministries of agriculture. During the household listing exercise 3,221 extension staff were used. For the enumeration of the small holder questionnaire, 1,611 enumerators were used and additional 5 percent enumerators were held in reserve in case of drop outs during the enumeration exercise.

2.6.10 Field Supervision and Consistency Checks

Enumerators were trained to probe the respondents until they were satisfied with the responses given before they recorded them in the questionnaire. The first check of the questionnaires was done by enumerators in the field during enumeration. The second check was done by the district supervisors followed by regional and national supervisors. Supervisory visits at all levels of supervision focused on consistency checking of the questionnaires. Inconsistencies encountered were corrected, and where necessary a return visit to the respondent was made by the enumerator to obtain the correct information. Further quality control checks were made through a major post enumeration checking exercise where all questionnaires were checked for consistencies by all supervisors in the district offices.

2.6.11 Data Processing

Data processing consisted of the following processes:

- Manual editing
- Data entry
- Data structure formatting
- Batch validation
- Tabulation
- Illustration production
- Report formatting

Manual Editing

Prior to scanning, all questionnaires underwent a manual cleaning exercise. This involved checking that the questionnaire had a full set of pages, correct identification and good handwriting. A score was given to each questionnaire based on the legibility and the completeness of enumeration. This score will be used to assess the quality of enumeration and supervision in order to select the best field staff for future censuses/surveys.

Data entry/Scanning and ICR extraction technologies

Scanning and ICR data capture technology was used for the small holder questionnaire. This not only increased the speed of data entry, it also increased the accuracy due to the reduction in keystroke errors. Interactive validation routines were incorporated into the ICR software to track errors during the verification process. The scanning operation was so successful that it is highly recommended that this technology be adopted for future censuses/surveys.

The Census and Surveys Processing Program (CSPro) was used to enter 2,880 of small holder questionnaires that were rejected by the Intelligent Character Recognition (ICR) extraction application.

Data structure formatting

A program was developed in visual basic to automatically alter the structure of the output from the scanning/extraction process in order to harmonise it with the manually entered data. The program automatically checked and changed the number of digits for each variable, the record type code, the number of questionnaires in the village, the consistency of the Village Identification (ID) code and saved the data of one village in a file named after the village code.

Batch validation

A batch validation program was developed in order to identify inconsistencies within a questionnaire. This is in addition to the interactive validation during the ICR extraction process. The procedures varied from simple range checking within each variable to more complex checking between variables. It took six months to screen, edit and validate the data from the smallholder questionnaire. After the long process of data cleaning, the results were prepared based on a pre-designed tabulation plan.

Tabulations

Statistical Package for Social Sciences (SPSS) was used to produce the Census results and Microsoft Excel was used to organize the tables and compute additional indicators.

Analysis and report preparation

The analysis in this report focuses on regional and district production estimates, districts comparisons and time series analysis. Microsoft Excel was used to produce charts; whereas Microsoft Word was used to compile the report.

Data quality

A great deal of emphasis was placed on data quality throughout the whole exercise from planning, questionnaire design, training, supervision, data entry, validation and cleaning/editing. As a result of this NBS believes that the Census is highly accurate and representative of what was experienced at field level during the Census year. With very few exceptions the variables in the questionnaire are within the norms for Tanzania and they follow expected time series trends when compared to historical data. Standard Errors and Coefficients of Variation for the main variables can be found in the Technical Report (Volume I).

2.7 Funding Arrangements

The Agricultural Sample Census was supported mainly by the European Union (EU) who financed most of the operational activities. Other funds for operational activities came from the Government of Tanzania, Government of Japan, United Nations Development Programme (UNDP) and other partners in the Pool Fund of the Vice President's Office (VPO). In addition to this, technical assistance was provided by the European Union (EU), Department for International Development (DFID) and Japanese International Cooperation Agency (JICA). Technical assistances were managed by Ultek Laurence Gould Consultants (ULG), Scotts Agriculture Consultancy Ltd (SAC) and the Food and Agriculture Organisation (FAO).

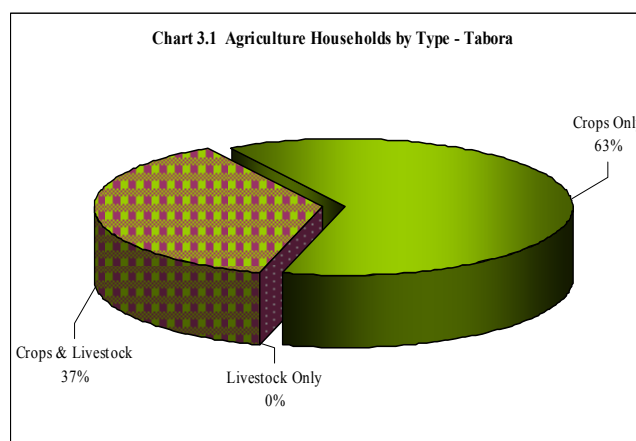
3. CENSUS RESULTS

This part of the report presents the results of the census for Tabora region based on the statistical tables presented in Appendix A2. The results are presented in different forms including brief summaries, charts, condensed tables, graphs and maps in order to make it easy for the users to understand. Comparisons are made between related variables and between districts. Comparisons are also made with past censuses and surveys' results such as the 1994/95 National Sample Census of Agriculture (NSCA), the 1995/96 and the 1996/97 Expanded Agricultural Surveys, the 1997/98 Integrated Agricultural Survey, the 1998/99 District Integrated Agricultural Survey and the 1999/00 Rapid Agricultural Appraisal Survey. . The results are divided into four main sections which are household characteristics, crop results, livestock results and poverty indicators. Compared to previous census and surveys, more effort has been placed in analyzing the results in order to formulate solid conclusions.

3.1 Household Characteristics

3.1.1 Type of Household

The number of agricultural households in Tabora region was 235,917. The largest number of agricultural households was in Nzega (65,566) followed by Urambo (54,120), Igunga (45,141), Uyui (41,318), Sikonge, (19,514) and Tabora Urban (10,258) (Map 3.1). The highest density of households was found in Nzega (27/km²) followed by Igunga (17/km²) (Map 3.2). Most households (148,046, 62.8%) were involved in growing crops only, 296 (0.1%) rearing livestock only, and 87,575 (37.1%) were involved in crop production as well as livestock keeping (Chart 3.1) (Maps 3.3, 3.4, 3.5 and 3.6).



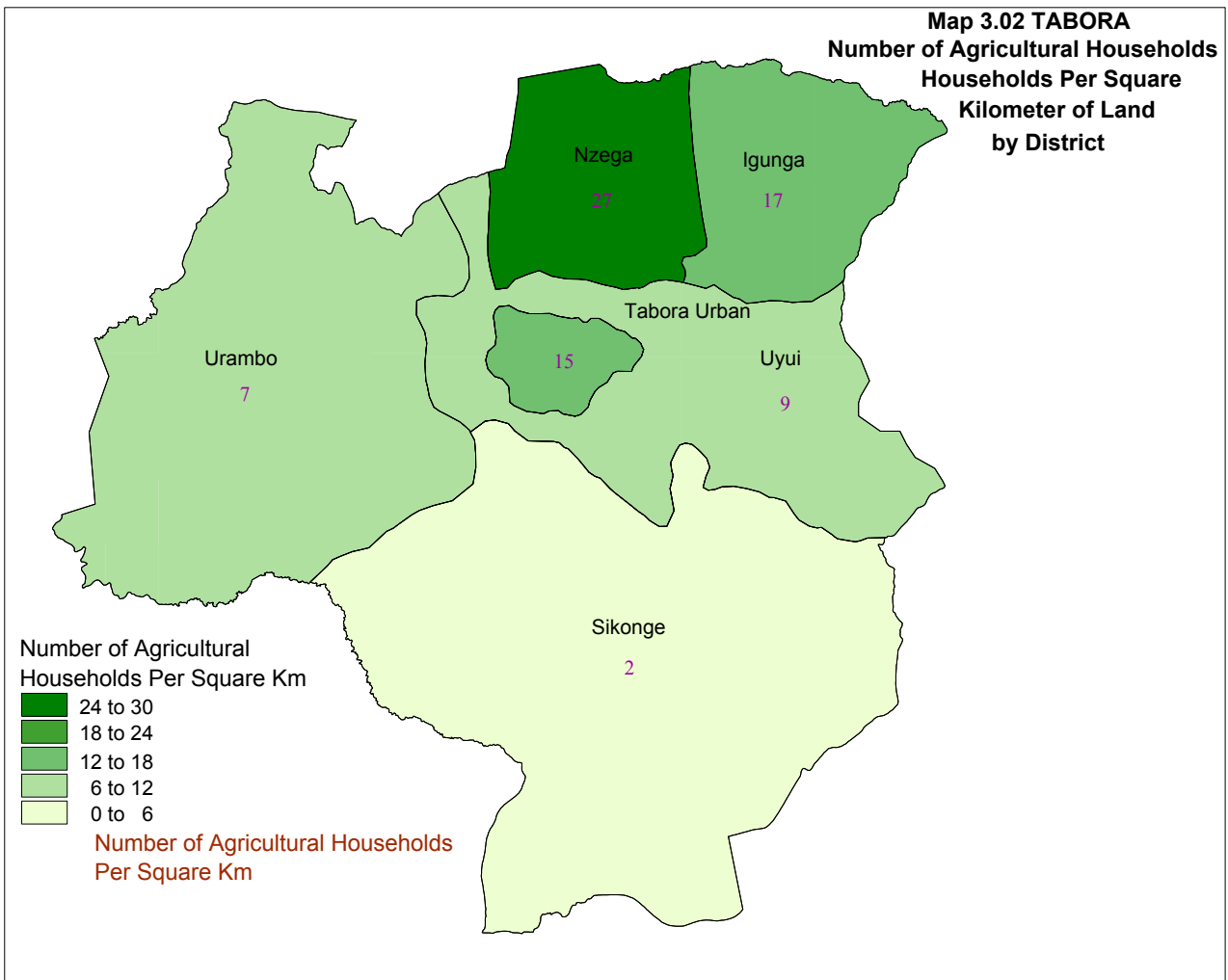
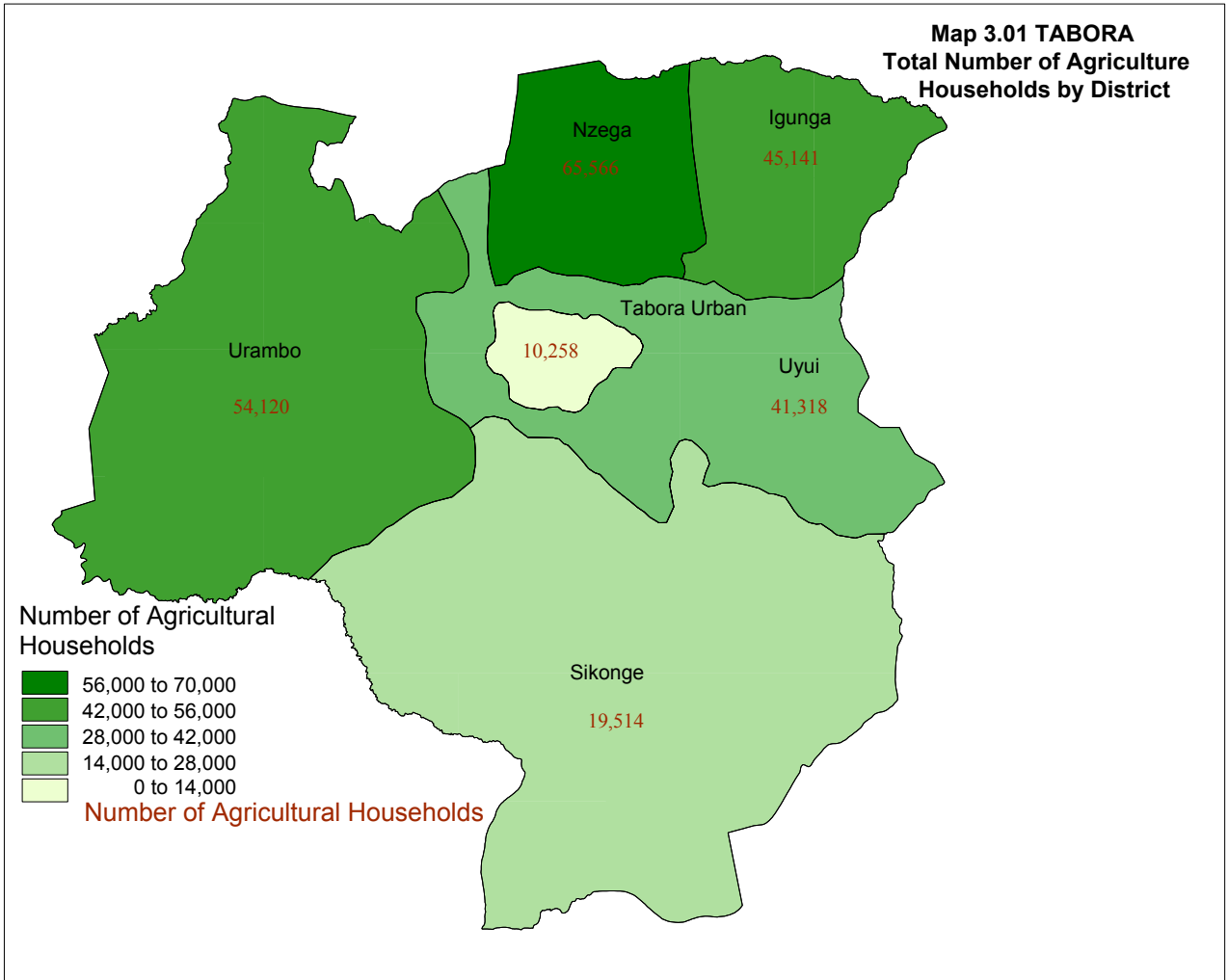
3.1.2 Livelihood Activities/Source of Income

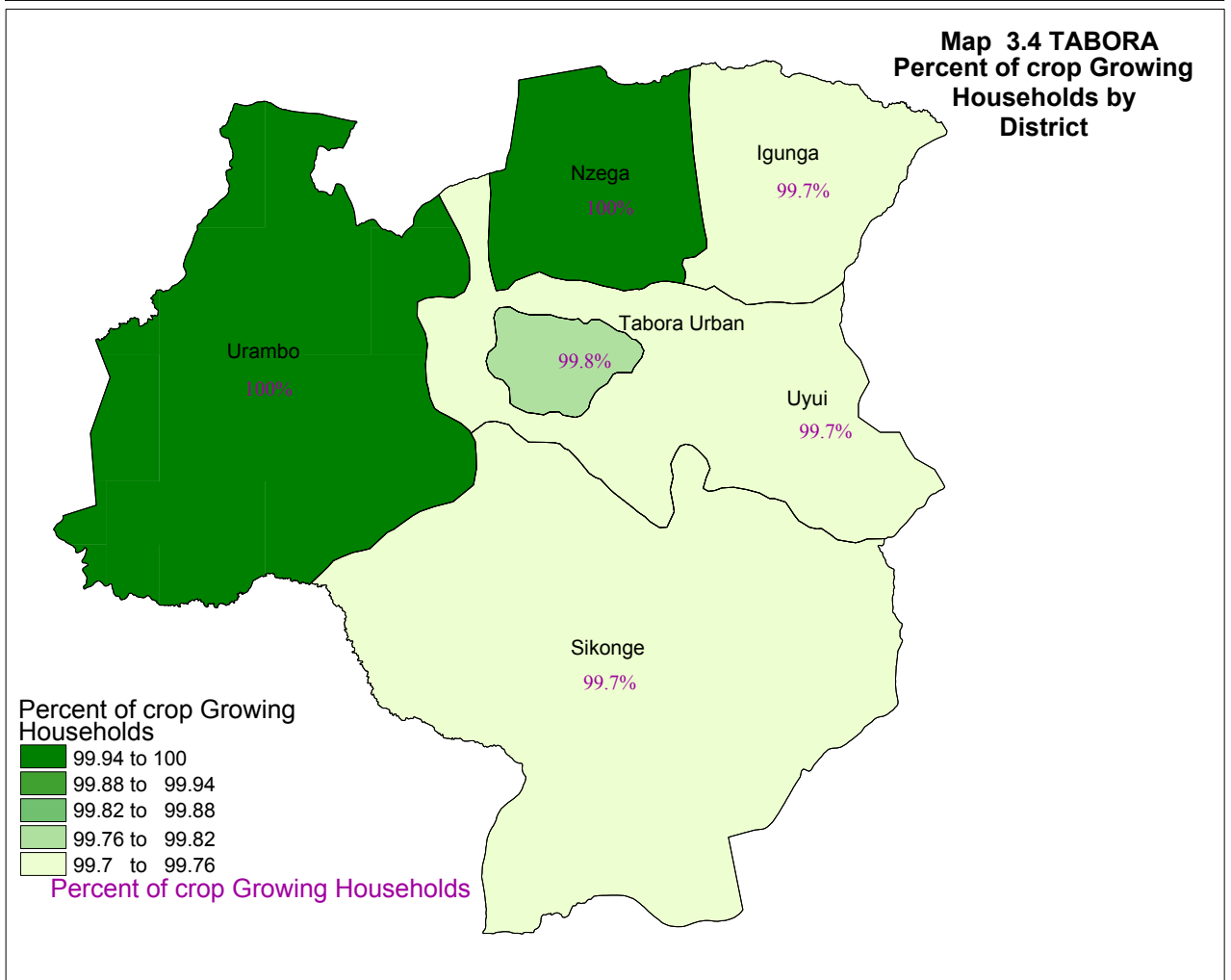
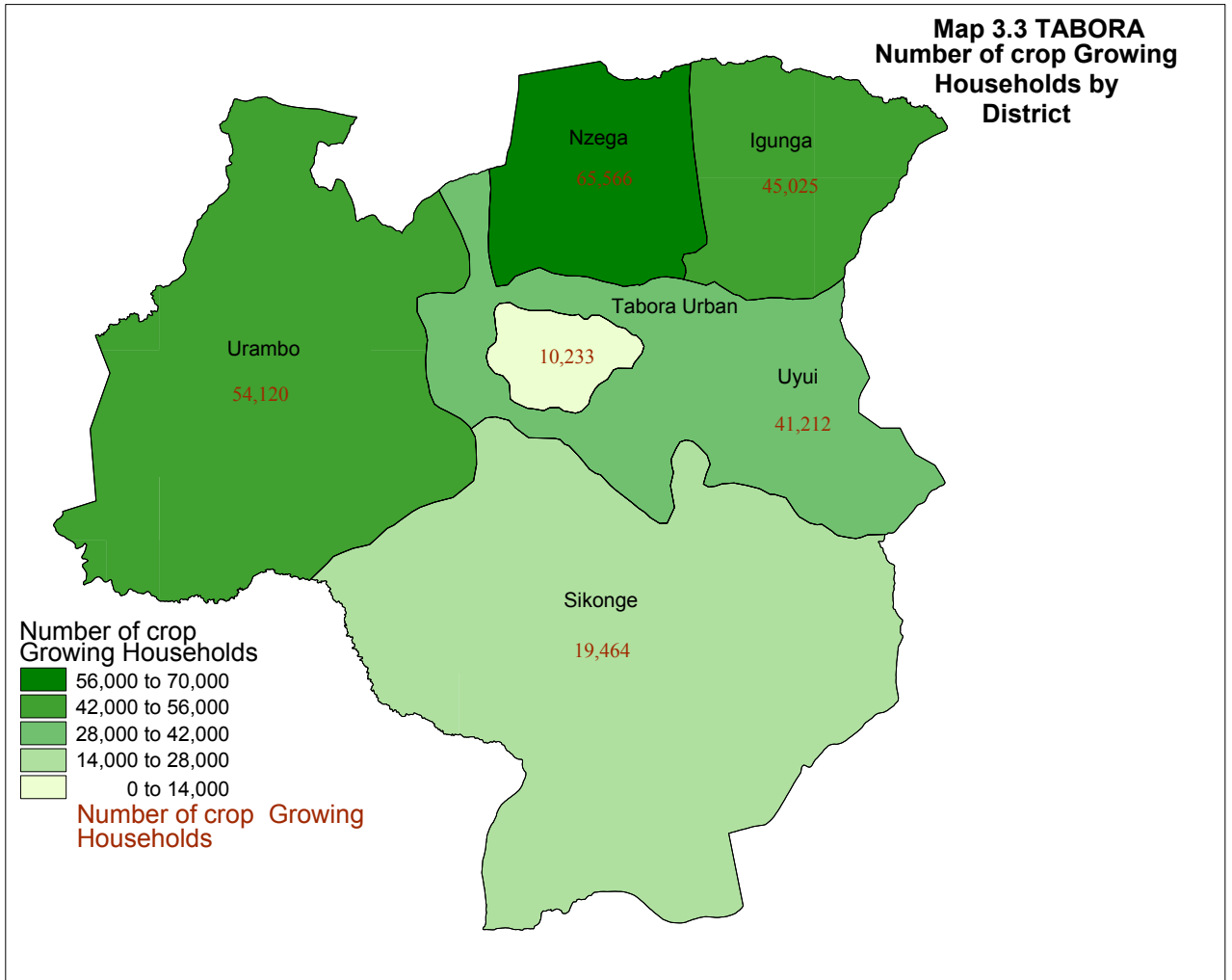
The census results for Tabora region indicates that most of the agricultural households ranked annual crop farming as an activity that provides most of their cash income followed by off farm income, tree/forest resources, livestock_keeping/herding, permanent crop farming, remittances

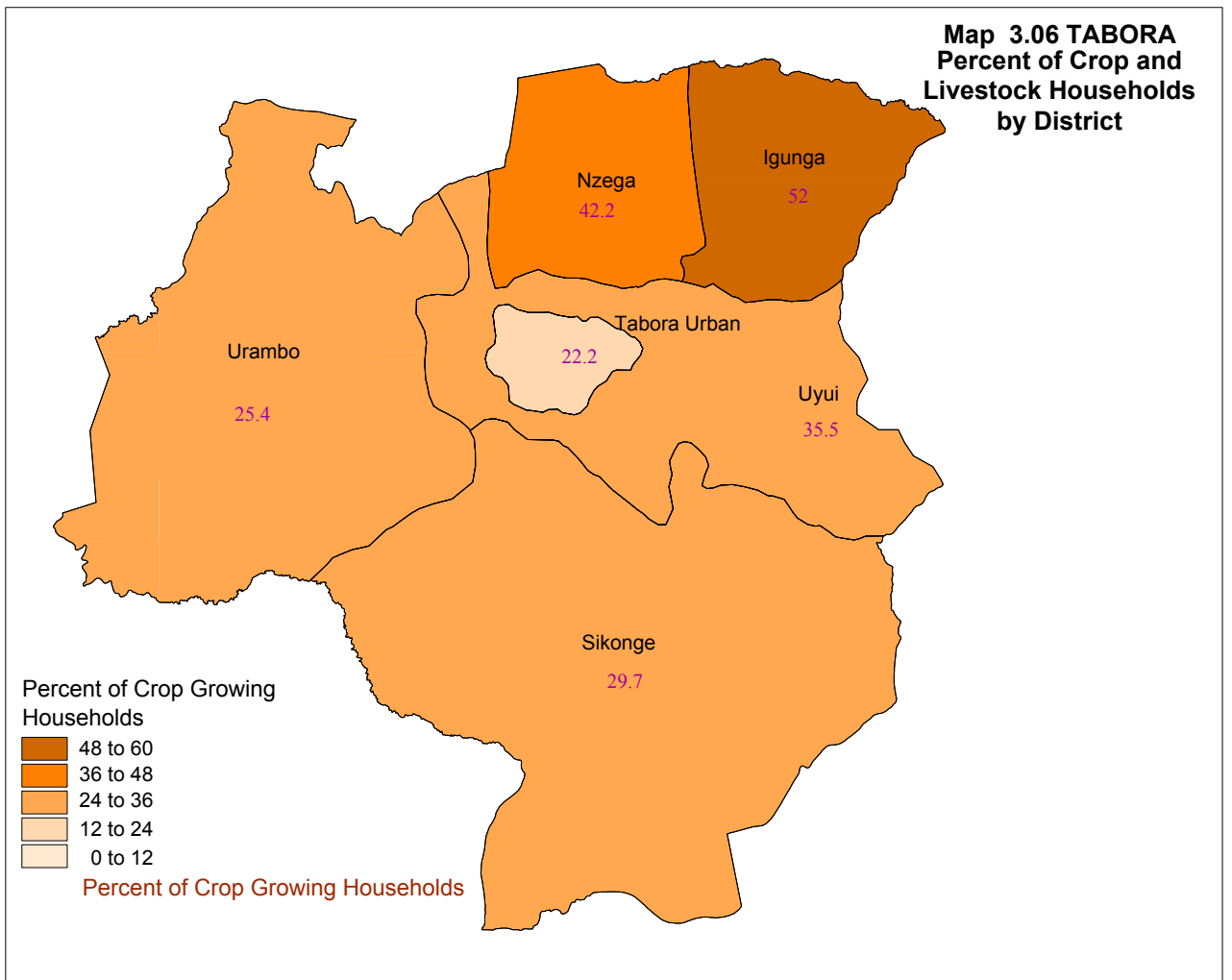
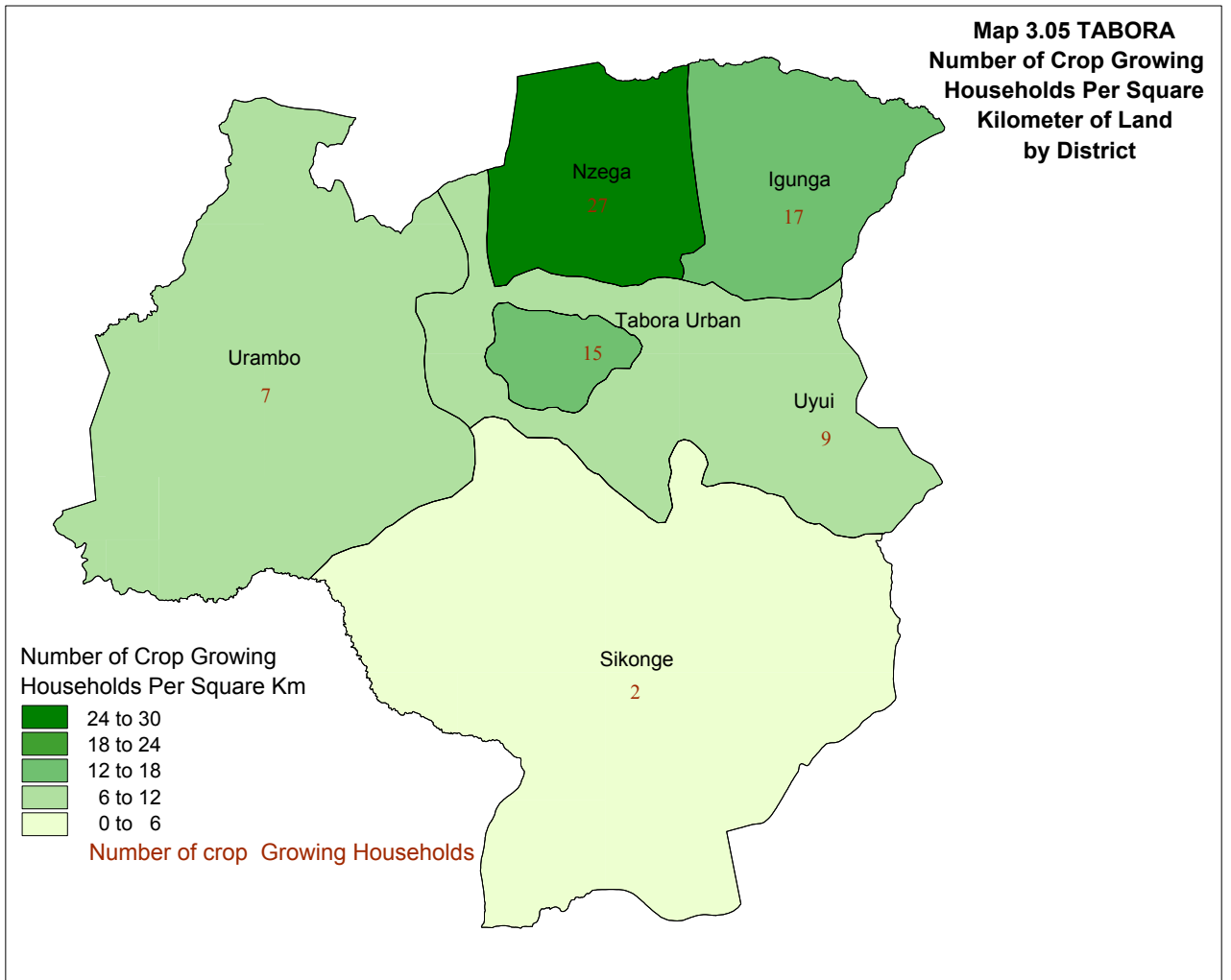
and fishing/hunting and gathering (Table 3.1). Annual crop farming was the most important source of livelihood for all districts while fishing/hunting and gathering was the least important source of income to all districts.

Table 3.1 The Livelihood Activities/Source of Income of the Households Ranked in Order of Importance by District

District	Livelihood Activity						
	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	1	5	3	4	6	7	2
Igunga	1	5	4	2	6	7	3
Uyui	1	4	3	2	6	7	5
Urambo	1	5	4	2	6	7	3
Sikonge	1	5	2	3	6	7	4
Tabora Urban	1	4	3	2	6	7	5
Total	1	5	4	2	6	7	3



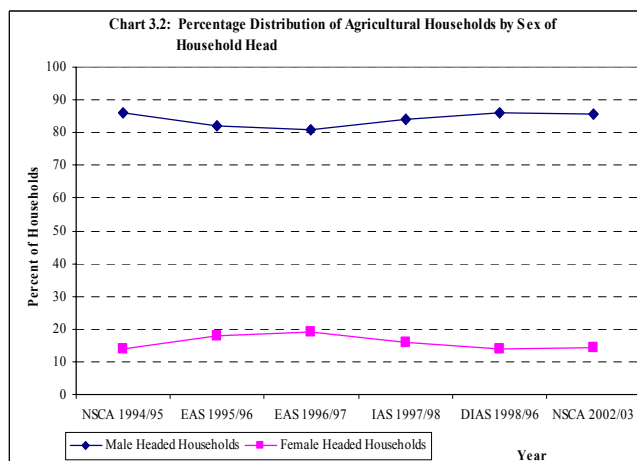




3.1.3 Sex and Age of Head of Households

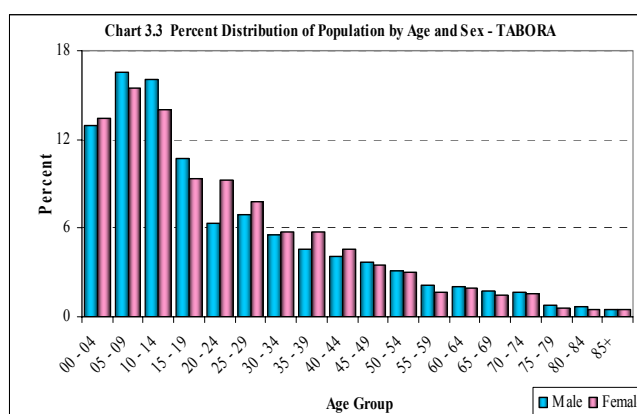
The number of male-headed agricultural households in Tabora region was 202,097 (86% of the total regional agricultural households) whilst the female-headed households it were 33,820 (14% of the total regional agricultural households). The mean age of household heads was 46 years (46 years for male heads and 52 years for female heads) (Chart 3.2)

The percentage trend for six censuses/surveys' years shows that there has not been any significant change in the distribution of agricultural households between male and female headed households.



3.1.4 Number and Age of Household Members

Tabora region had a total rural agricultural population of 1,420,300 of which 732,811 (52%) were males and 687,489 (48%) were females. Whereas age group 0-14 constituted 44 percent of the total rural agricultural population, age group 15-64 (active population) was only 51 percent. Tabora region had an average household size of 6 persons per household with Nzega and Tabora Rural districts having the lowest household size of 5 (Chart 3.3).



3.1.5 Level of Education

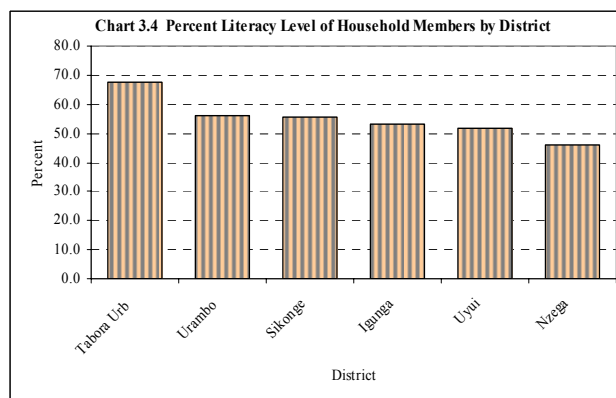
In order to obtain information on the level of education, information on literacy and education attainment were obtained for all persons aged five years and above in all households.

Literacy

The information on literacy level for family members aged five years and above was obtained by asking individual private households if their respective family members could read and write in Kiswahili only, English only, both English and Swahili or in any other language. Literacy is based on the ability to read and write Swahili, English or both.

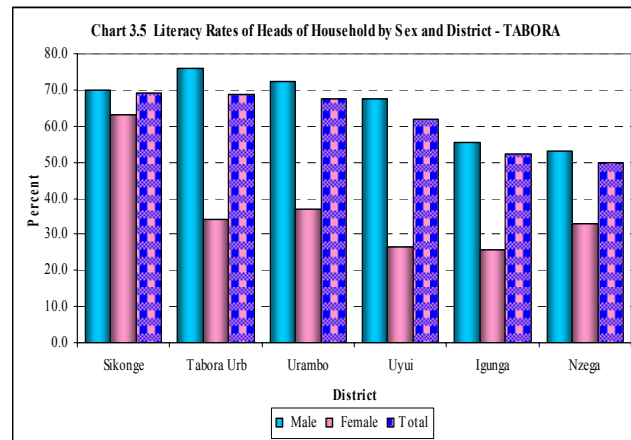
Literacy Level for Household Members

Tabora region had a total literacy rate of 52.5 percent. The highest literacy rate was found in Tabora Urban district (67.4%) followed by Urambo district (56.0%) and Sikonge district (55.7%). Igunga, Uyui and Nzega districts had the lowest literacy rates of 53.3, 51.8 and 46.0 percent respectively (Chart 3.4).



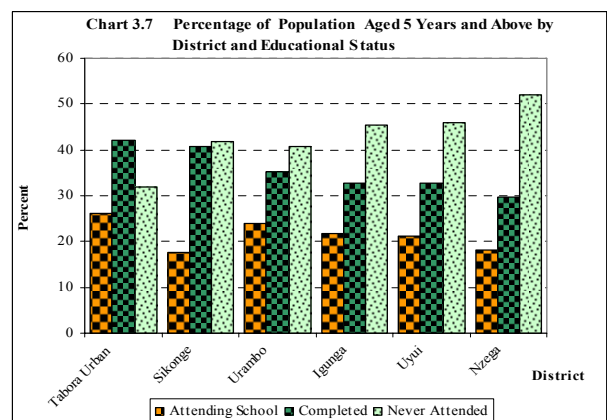
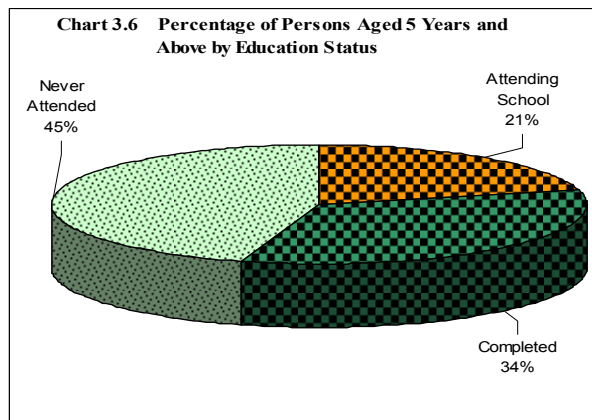
Literacy Rates for Heads of Households

The literacy rate for the heads of households in the region was 58.9 percent. The literacy rate for the male heads was 63.0 percent and that of female heads of households has 34.1 percent. The literacy rate of male heads was higher than that of female heads in all districts. The district with the highest literacy rate amongst for all heads of households was Sikonge (69.2%) followed by Tabora Urban (68.9%), Urambo (67.6%), Uyui (62.0%), Igunga (52.3%) and Nzega (49.7%) (Chart 3.5).

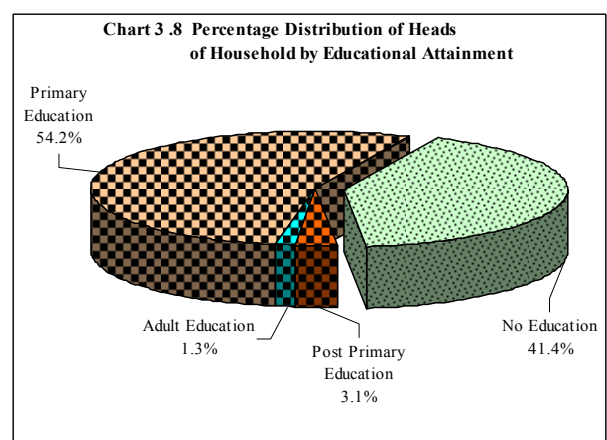


Educational Status

Information on educational status was collected from individual agricultural households. The results show that 34 percent of the population aged 5 years and above in agricultural households in the region had completed different levels of education and 21 percent were still attending school. Those who have never attended school were 45 percent (Chart 3.6).



Agricultural households in Tabora Urban district had the highest percentage (42%) of population aged 5 years and above who had completed different levels of education. This was followed by Sikonge and Urambo districts with 41 and 35 percent respectively. Igunga, Uyui and Nzega districts had the lowest percentages of 33, 33 and 30 respectively.

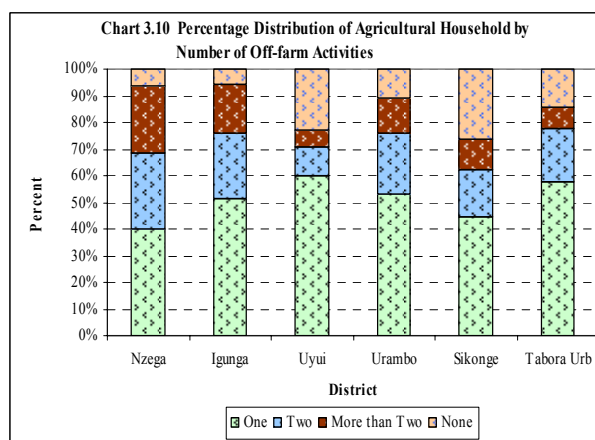
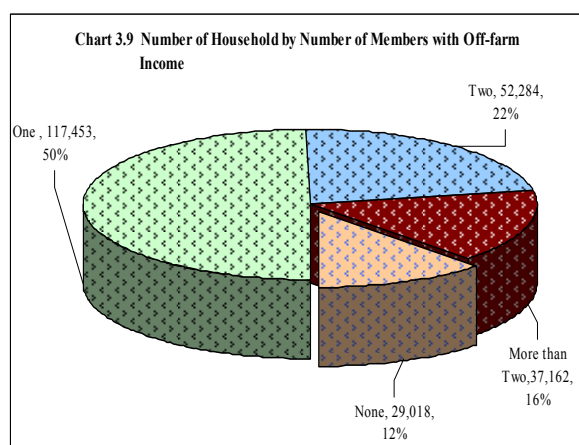


The number of heads of agricultural households with formal education in Tabora region was 135,084 (57.3%), those without formal education were 97,767 (41.4%) and those with only adult education were 3,066 (1.3%). The majority of heads of agricultural households (54.2%) had primary level education whereas only 3.1 percent had higher than primary level education.

With regard to the heads of agricultural households with primary or secondary education in Tabora region, Sikonge district had the highest percentages (64.6% for primary and 3.8% for secondary). This was followed by Tabora Urban (62.3% primary and 4.0% secondary), Urambo (60.8% primary and 2.8% secondary) and Uyui (57.3% primary and 3.0% secondary), Igunga (48.9% primary and 1.0% secondary) and Nzega (46.1% primary and 2.1% secondary). Tabora Urban had the highest percentage of heads of agricultural households with secondary school education while Igunga had the lowest. (Chart 3.8).

3.1.6 Off-farm Income

Off-farm income refers to cash generated from non-agricultural activities. This can be either from permanent employment (i.e., government, private sector or other), temporary employment or laborers. It also includes cash generated from working on farms belonging to other farmers. Off-farm income is important amongst agriculture households in Tabora with 87.7 percent of households having at least one member with off-farm income. In Tabora region, there were 206,899 households with at least one household member engaged in off-farm income generating activity 117,453 households (50%) had only one member aged 5 years and above engaged in an off-farm income generating activity, 52,284 households (22%) had two members involved in off-farm income generating activities and 37,162 households (16%) had more than two members involved in off-farm income generating activities.



Igunga and Nzega district had the highest percentage of agriculture households with off-farm income (over 90% of total agriculture households in the district). Other districts with high percent of agriculture households with off-farm income were Urambo (89%) and Tabora Urban (86%). Uyui and Sikonge districts had the lowest percent of agriculture households with off-farm income (77% and 74% respectively). The district with the highest percent of agriculture households with more than one member with off-farm income was Nzega (54%). Uyui district had few households with more than one member having off-farm income (17%).

3.2 Land Use

Land area and planted area are two different types of area measurements. Land area refers to the physical area of land and is the same regardless of the number of crops planted on it in one year. Planted area is the total area of crops planted in a year and the area is summed if there were more than one crop on the same land per year. A number of terms are used in this section which requires defining for clarification as follows:

Land available refers to the area of land that has been allocated to smallholders through customary law, official title or other forms of ownership. Land available does NOT mean the total area of land that is designated as agriculture land in the

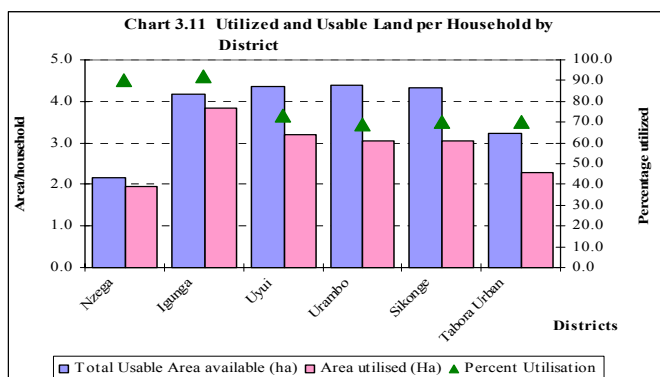
country, but it is the land that is available to smallholders given the location of villages and lack of access to more remote parcels of unused agriculture designated land.

Usable land refers to the available land minus the land that cannot be used e.g. bare rock, shallow soils, steep slopes, swamp areas etc. It does however include un-cleared bush, Utilised land refers to the land that was used during the year.

3.2.1 Area of Land Utilised

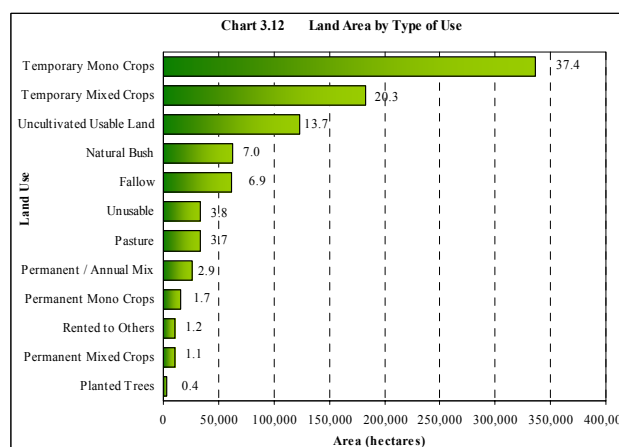
The total area of land available to smallholders was 899,225 ha. The regional average land area utilised for agriculture per household was only 2.9 ha. This figure is above the national average which is estimated at 2.0 hectares.

Large differences in land area utilised per household exist between districts with Igunga and Nzega utilizing between 3.8 and 1.9 ha per household. The percentage utilized of the usable land per household was highest in Igunga (92%) and lowest in Urambo (69%) (Map 3.7). Seventy eight percent of the total land available to smallholders was utilised. Twenty two percent of usable land available to smallholders was not used (Chart 3.11, Map 3.7)



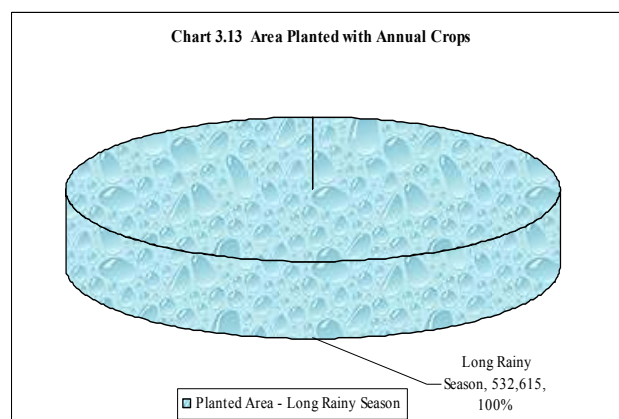
3.2.2 Types of Land Use

The area of land under temporary mono-crops was 336,318 hectares (37.4% of the total land available to smallholders in Tabora), followed by temporary mix (182,793 ha, 20.3%), uncultivable usable land (122,977, 13.7%), natural bush (63,072 ha, 7%), area under fallow (62,016 ha, 6.9%), unusable land (33,763 ha, 3.8), pasture (62,016 ha, 6.9%), unusable land (33,763 ha, 3.8), pasture (33,264 ha, 3.7%), permanent annual mix (25,917 ha, 2.9%), permanent mono-crops (15,179 ha, 1.7%), area rented to others (10,553 ha, 1.2%), permanent mixed crops (10,136 ha, 1.1%) and area planted with trees (3,237 ha, 0.4%).



3.3 Annual Crop and Vegetable Production

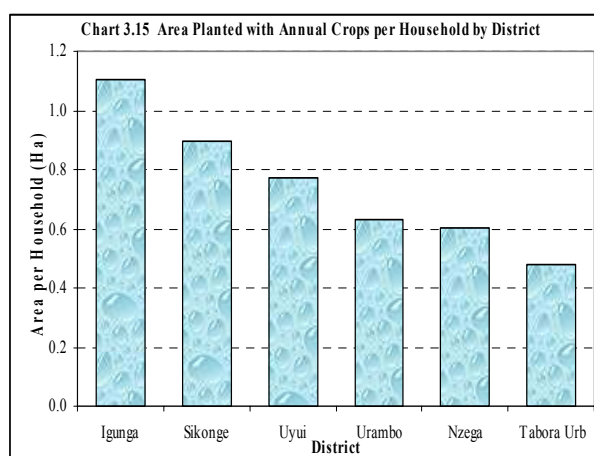
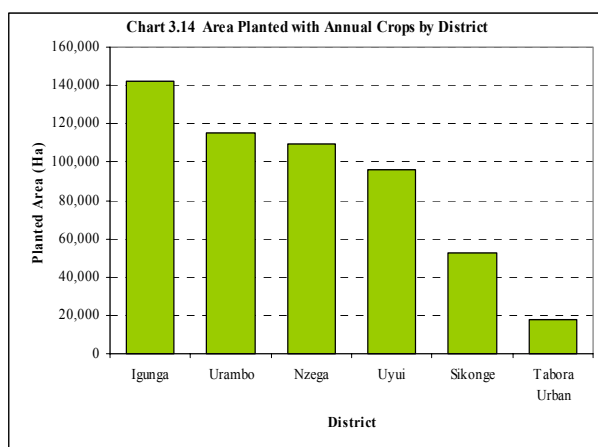
Tabora region has only one rainy season, namely the long rainy season (November to May). The quantity of crops produced in that season will be used as a base for comparison with the past surveys and censuses.



3.3.1 Area Planted

The area planted with annual crops and vegetables was 532,615. The average areas planted per household was 0.7. The district with the largest area planted per household was Igunga (1.1 ha) followed by Sikonge (0.9 ha) and Uyui (0.8 ha). The district with the smallest average area planted per household was Tabora Urban (0.5ha). (Chart 3.14 and Map 3.8).

The planted area occupied by cereals was 347,455 ha (65.2% of the total area planted with annuals). This was followed by oil seeds (69,862 hectares, 13.1%), cash crops (54,948 hectares, 10.3%), root and tuber crops (31,535 hectares, 5.9%), pulses (25,911 hectares, 4.9%) fruits and vegetables (2,904 hectares, 0.5%).

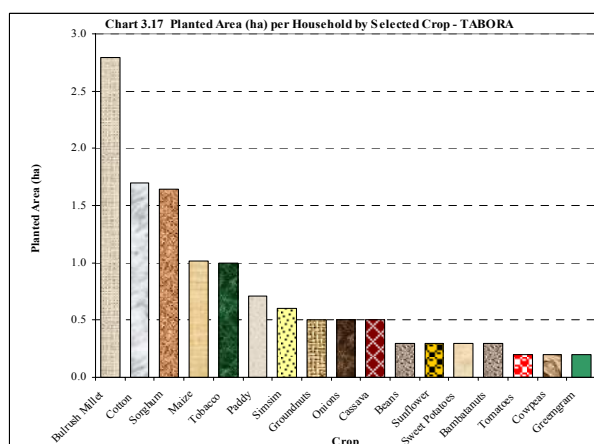
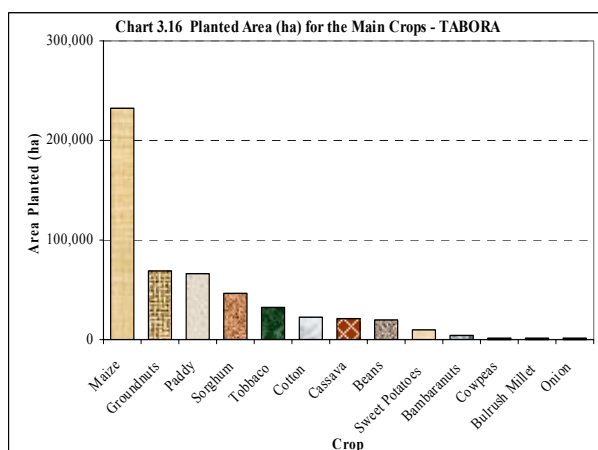


Analysis of the Most Important Crops

Results on crop production are presented in two different sections. The first section compares the importance of each crop regardless of whether they are annual or permanent. The second section contains a more detailed analysis on production based on crop types.

3.3.2 Crop Importance

Maize is the dominant annual crop grown in Tabora region and it had a planted area 3.4 times greater than groundnuts, which had the second largest planted area. The area planted with maize constituted 44 percent of the total area planted with annual crops in the region. Other crops in order of their importance (based on area planted) are paddy, sorghum, tobacco, cotton, cassava and beans (Chart 3.16). Households that grow bulrush millet, cotton, sorghum, maize and tobacco have larger planted areas per household than those growing other crops (Chart 3.17).



3.3.3 Crop Types

Cereals are the main crops grown in Tabora region. The area planted with cereals was 347,455 ha (65.% of the total area planted with annuals), followed by oil seeds (69,862 hectares, 13.%), cash crops (54,948 hectares, 10%), root and tuber crops (31,535 hectares, 6%), pulses (25,911 hectares, 5%) fruits and vegetables (2,904 hectares, 1%). Cereals and oil seeds and oil seeds are the dominant crops and other crop types are of minor importance in comparison (Chart 18).

3.3.4 Cereal Crop Production

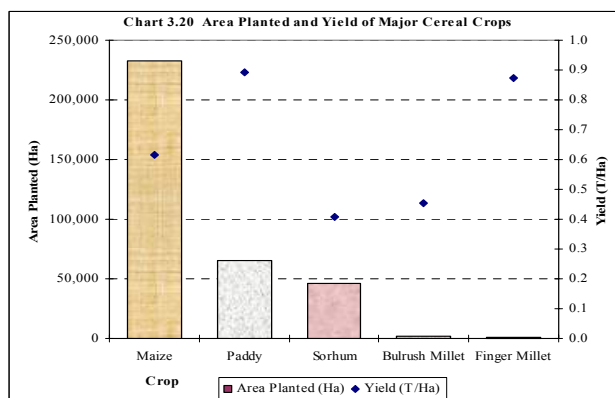
The total production of cereals was 222,315 tonnes. Maize was the dominant cereal crop at 143,122 tonnes which was 64.4 percent of total cereal crops produced, followed by paddy (26.4%) sorghum (8.5%), finger millet (0.4%) and bulrush millet (0.3%). Production of wheat and barley was very small. Igunga district had the largest planted area of Cereals in the region (101,943ha) followed by Nzega, (79,731ha), Uyui (64,269ha), Urambo (59,115), Sikonge (32,371ha) and Tabora Urban (10,025ha) (Map 3.9).

Table 3.2: Area, Production and Yield of Cereal Crops

Crop	Area Planted (ha)	Quantity Harvested (tonnes)	Yield (kg/ha)
Maize	232,860	143,122	615
Paddy	65,657	58,661	893
Sorghum	46,379	18,959	409
Bulrush Millet	1,545	700	453
Finger Millet	881	769	873
Wheat	33	15	455
Barley	100	89	889
Total	347,455	222,315	

Maize had the largest planted area which represented 67 percent of the total area planted with cereal crops. It was followed by paddy (19%), sorghum (13%), bulrush millet (0.4%) and finger millet 0.3%). Areas planted with wheat and barley were very small.

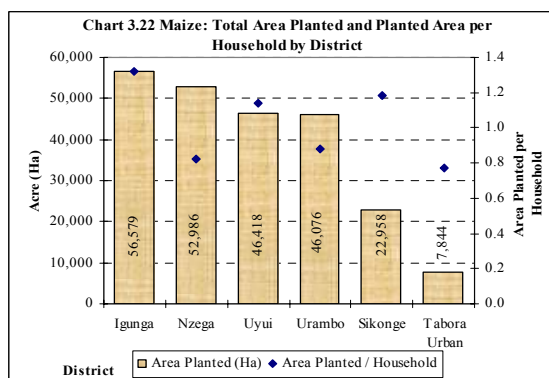
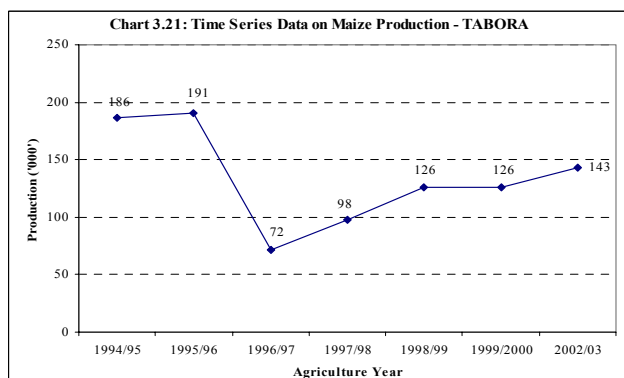
Paddy had the largest yield at 893 kg/ha, followed by finger millet (873 kg/ha), maize (615 kg/ha), bulrush millet (453 kg/ha) and sorghum (409 kg/ha) (Chart 3.20).

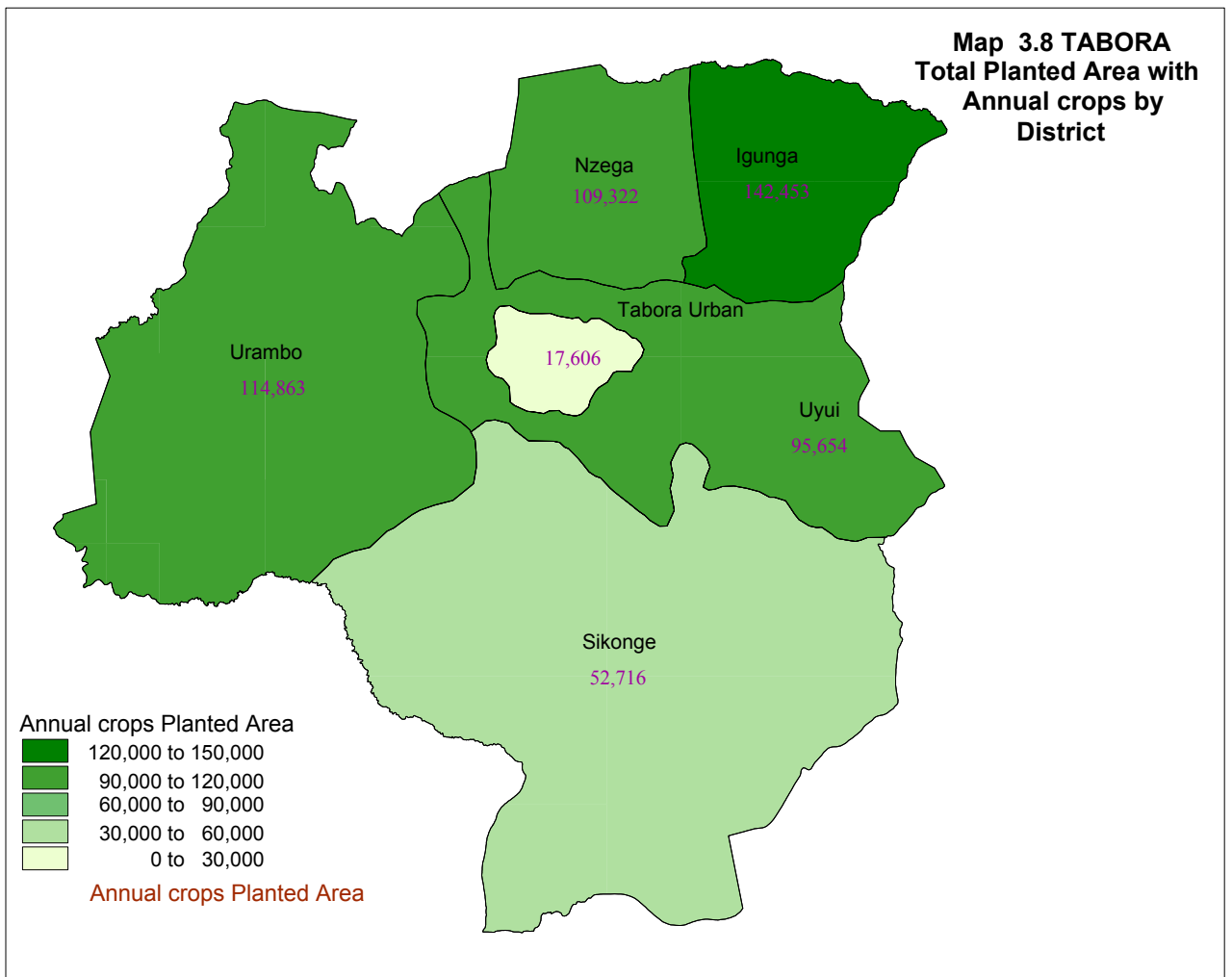
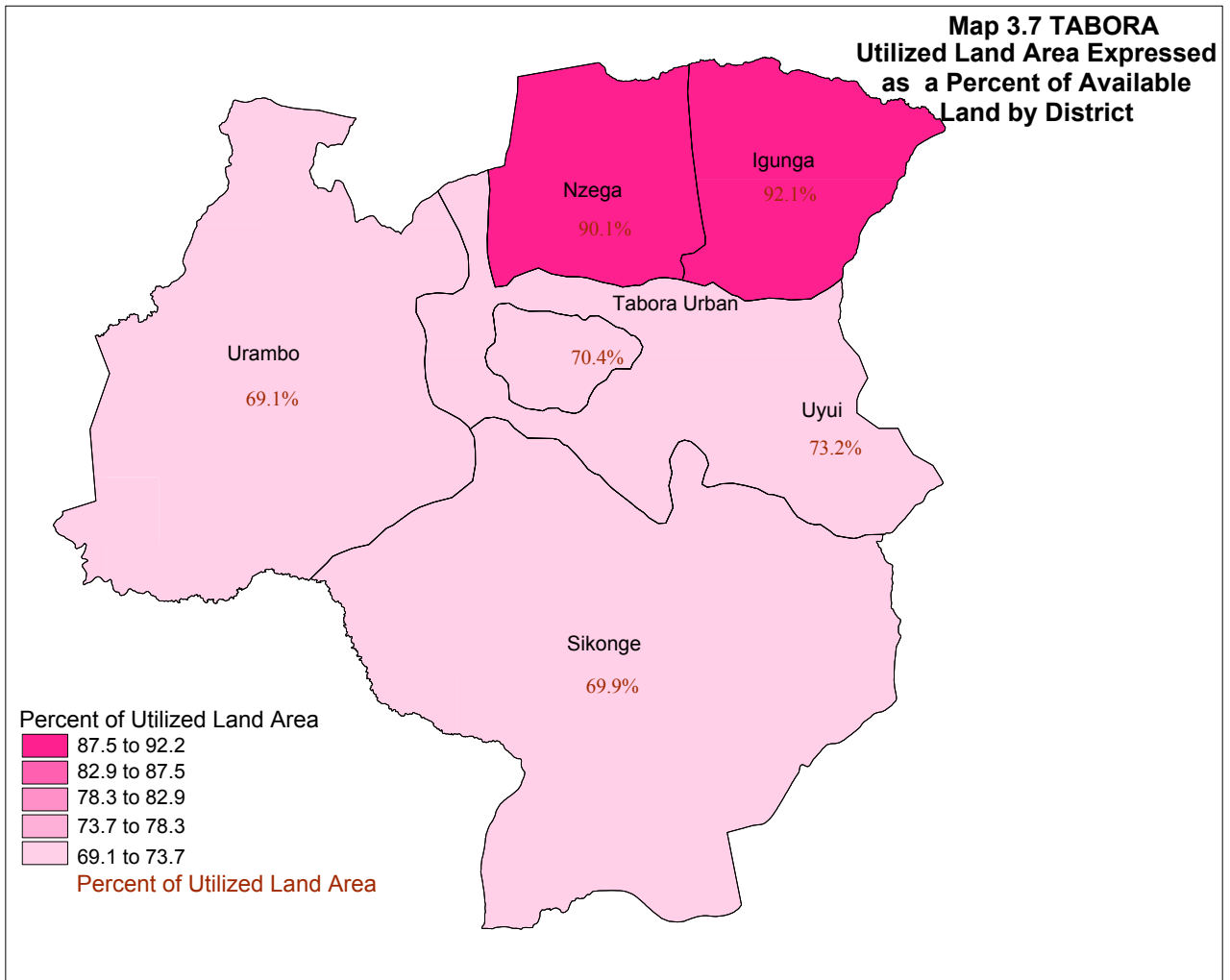


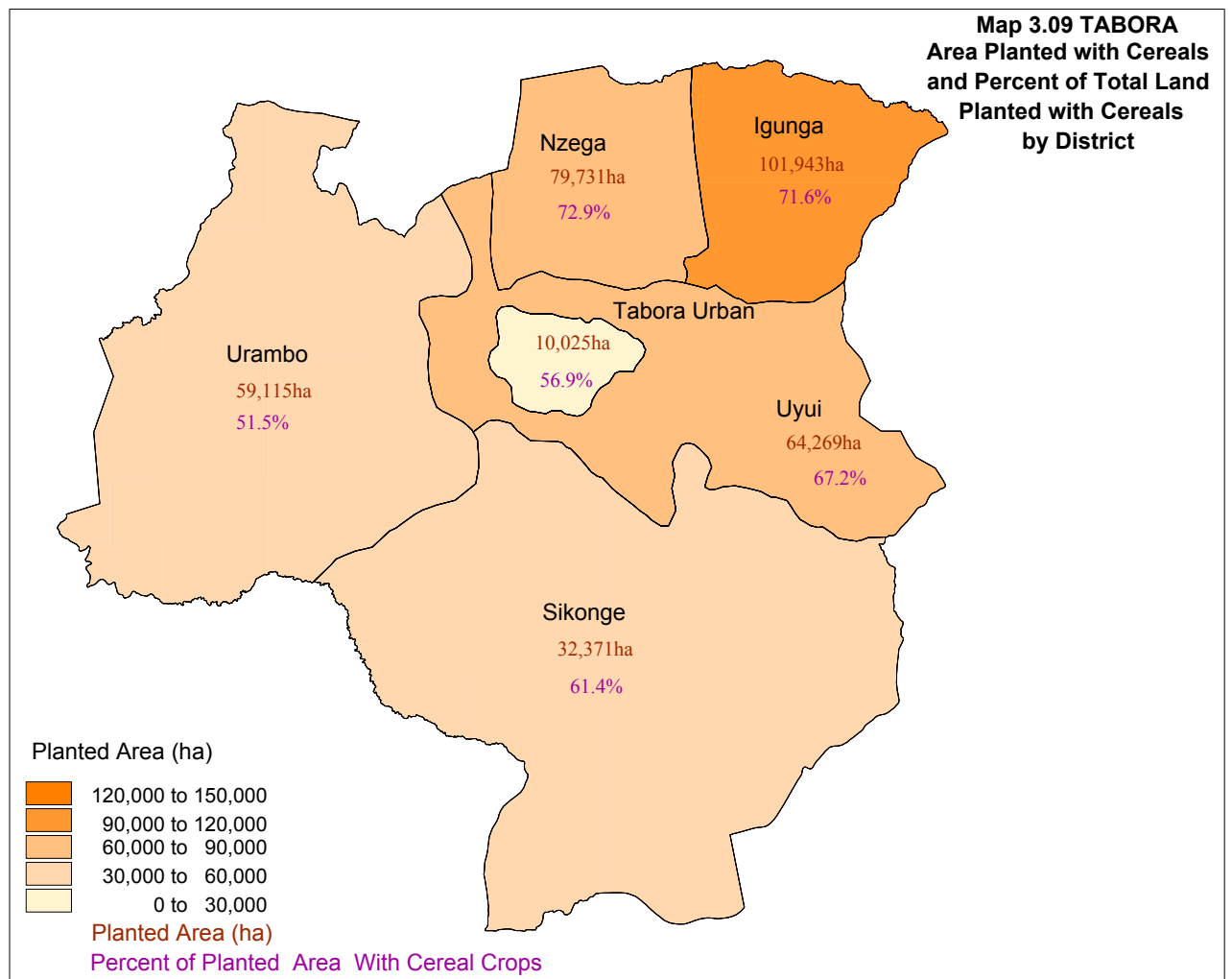
3.3.4.1 Maize

Maize dominates the production of cereal crops in the region. The number of households growing maize in Tabora region was 229,901, (65% of the total annual crop growing households in the region). The total production of maize was 143,122 tonnes from a planted area of 232,860 hectares resulting in a yield of 0.6 t/ha.

Chart 3.21 indicates maize production trend (in thousand metric tonnes). There was a sharp decrease in maize production by 62 percent in 1996/97 followed by a steady increase in production until 2002/03. The average area planted with maize

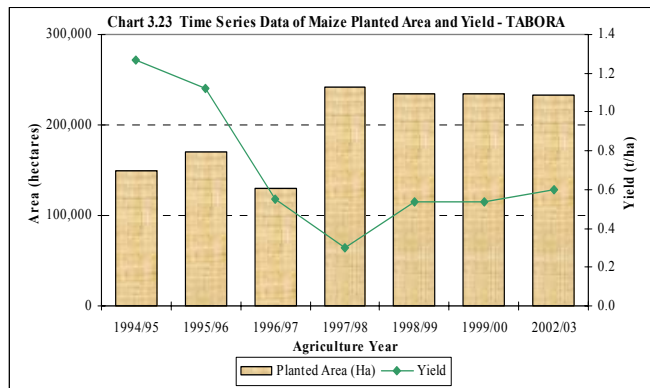






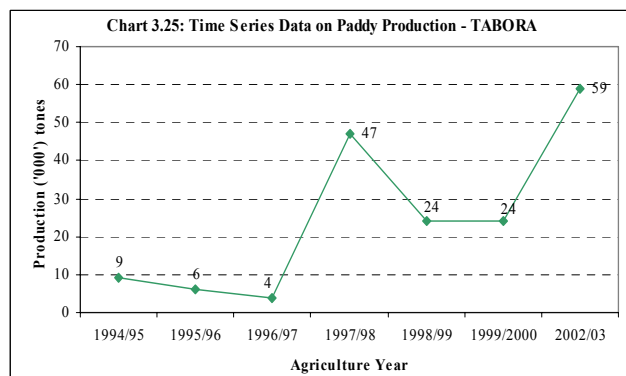
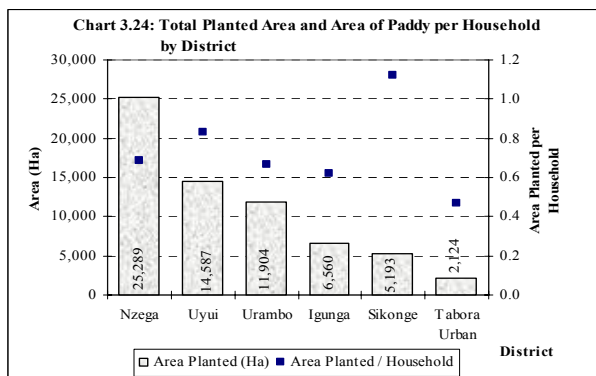
per household was 1.0 hectare, however it ranged from 0.8 hectares in Tabora Urban and Nzega districts to 1.3 hectares in Igunga district (Map 3.11). Igunga district had the largest area of maize (56,579 ha) followed by Nzega (52,986 ha), Uyui (46,418 ha), Urambo (46,076 ha), Sikonge (22,958 ha) and Tabora Urban (7,844 ha) (Chart 3.22 and Map 3.10).

Charts 3.21 and 3.23 show that, over the period of 8 years from 1994/95 to 2002/03 both the yield and production decreased during the first half of the period and increased gradually during the remaining half. The area planted with maize remained constant but low over the period from 1994 to 1996 after which the area expanded rapidly 1997/98 and remained constant up to the year 2002/03. During the period 1997/98 to 2002/03, the yield increased gradually from 0.3 t/ha in 1997/98 to 0.6 t/ha in 2002/03 (Chart 3.23).



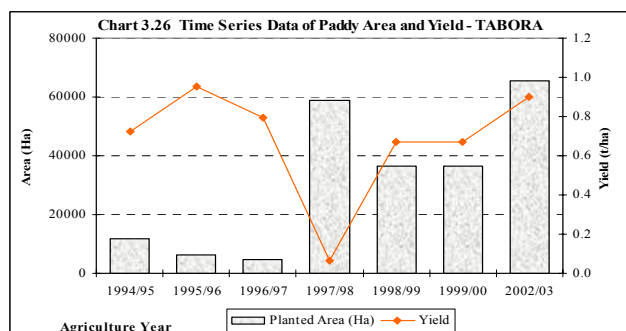
3.3.4.2 Paddy

Paddy is the second most important cereal crop in the region in terms of planted area. The number of households that grew paddy in Tabora region was 92,037. This represents 39 percent of the total annual crop growing households in Tabora region. The total production of paddy was 58,661 tonnes from a planted area of 65,657 hectares resulting in a yield of 0.9 t/ha. The district with the largest area planted with Paddy was Nzega (25,289 ha) followed by Uyui (14,587 ha), Urambo (11,904 ha), Igunga (6,560 ha), Sikonge (5,193 ha), and Tabora Urban (2,124 ha) (Map 3.12). There were variations in the average area planted per crop growing household among the districts ranging from 0.5 ha in Tabora Urban to 1.1 ha in Sikonge (Chart 3.24 and Map 3.13)



There was a sharp rise in the production of paddy in 1997/98 and in 2002/03 compared to 1996/97 and 1999/2000 respectively. The production rose from 3,861 tonnes in 1996/97 to 46,601 tonnes in 1997/98 after which it dropped to 24,370 tonnes in the following year. Also, the production rose from 24,370 tonnes in 1999/00 to 58,661 tonnes in 2002/03.

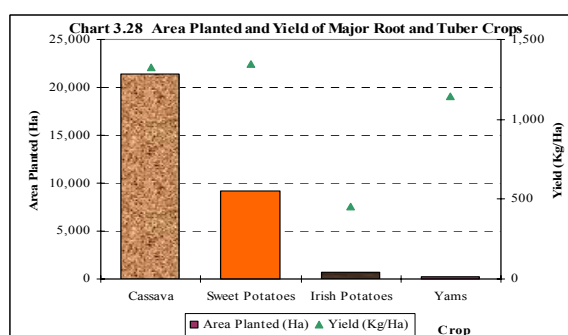
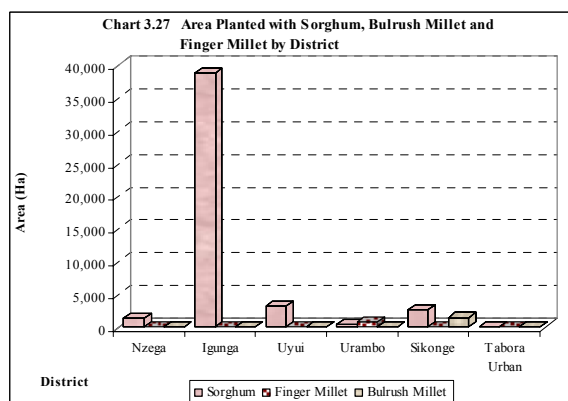
Charts 3.25 and 3.26 show that, whilst the yield of paddy has been erratic over the 8 year period from 1994/95 to 2002/03, the quantity produced increased due to a large increase of the planted area. From 1997/98 to 2002/03 the yield



has not dropped. The area planted with paddy and the production dropped drastically from 1994/95 to 1996/97 followed by rapid increase in 1997/98 after which the area planted and the production dropped rapidly in 1998/99. From 1999/2000 to 2002/03 the area planted and the production has been increasing (Chart 3.26).

3.3.4.3 Other Cereals

Other cereals are produced in small quantities except sorghum of which the planted areas were as follows: Igunga (38,804 ha) followed by Uyui (3,162 ha), Sikonge (2,665 ha), Nzega (1,347 ha), Urambo (345 ha) and Tabora Rural (57 ha). Bulrush millet is produced in Sikonge (1,436 ha), Urambo (70 ha) and Uyui (39 ha) while finger millet was produced in Urambo (722 ha), Nzega (98 ha), Uyui (43 ha) and Sikonge (19 ha). The production of wheat and barley were very small.



3.3.5 Roots and Tuber Crops Production

The total production of roots and tubers was 41,380 tonnes. Cassava production was the highest being 28,416 tonnes, representing 68.7 percent of the total root and tuber crops production. This was followed by sweet potatoes with 12,351 tonnes (29.8%), Irish potatoes (329 tonnes, 0.8%) and yams (283 tonnes, 0.7%) (Table 3.3).

The area planted with cassava was the largest in the region root and tuber crops. It accounted for 67.8 percent of the area planted with roots and tubers, followed by sweet potatoes (29.1%), Irish potatoes (2.3%) and yams (0.8%).

There was a significant increase in area planted with cassava in the eight year period from 1994/95 to 2002/03. The area for sweet potato and yams remained more or less constant.

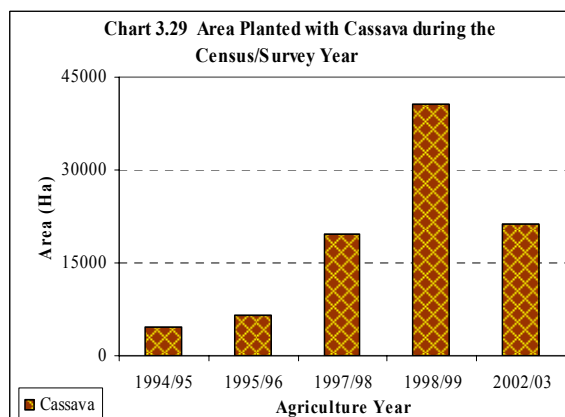
The estimated yield was highest for sweet potatoes (1.34 t/ha) and cassava (1.32 t/ha), followed by yams (1.14 t/ha) and Irish potatoes 0.5 t/ha).

3.3.5.1 Cassava

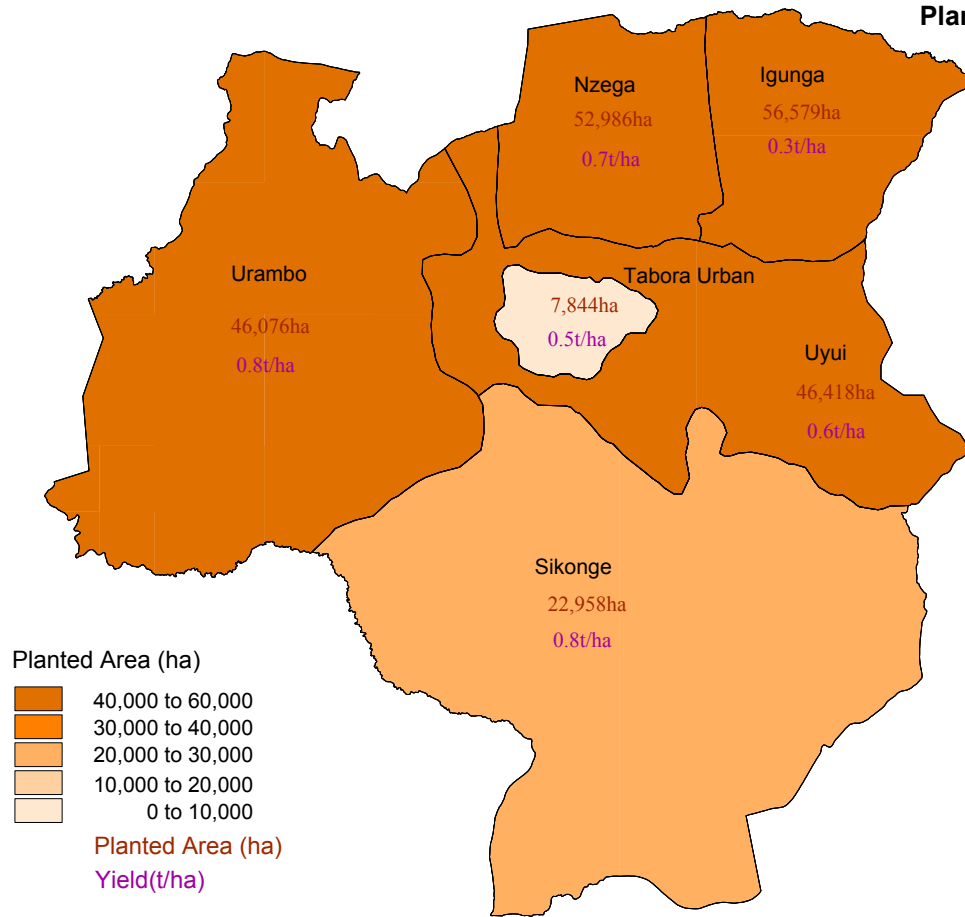
The number of households growing cassava in the region was 47,395. This represents 20 percent of the total crop growing households in the region. The total production of cassava during the census year was 28,416 tonnes from a planted area of 21,391 hectares resulting in a yield of 1.3 t/ha.

Table 3.3: Area, Quantity Harvested and Yield of Root and Tuber Crops

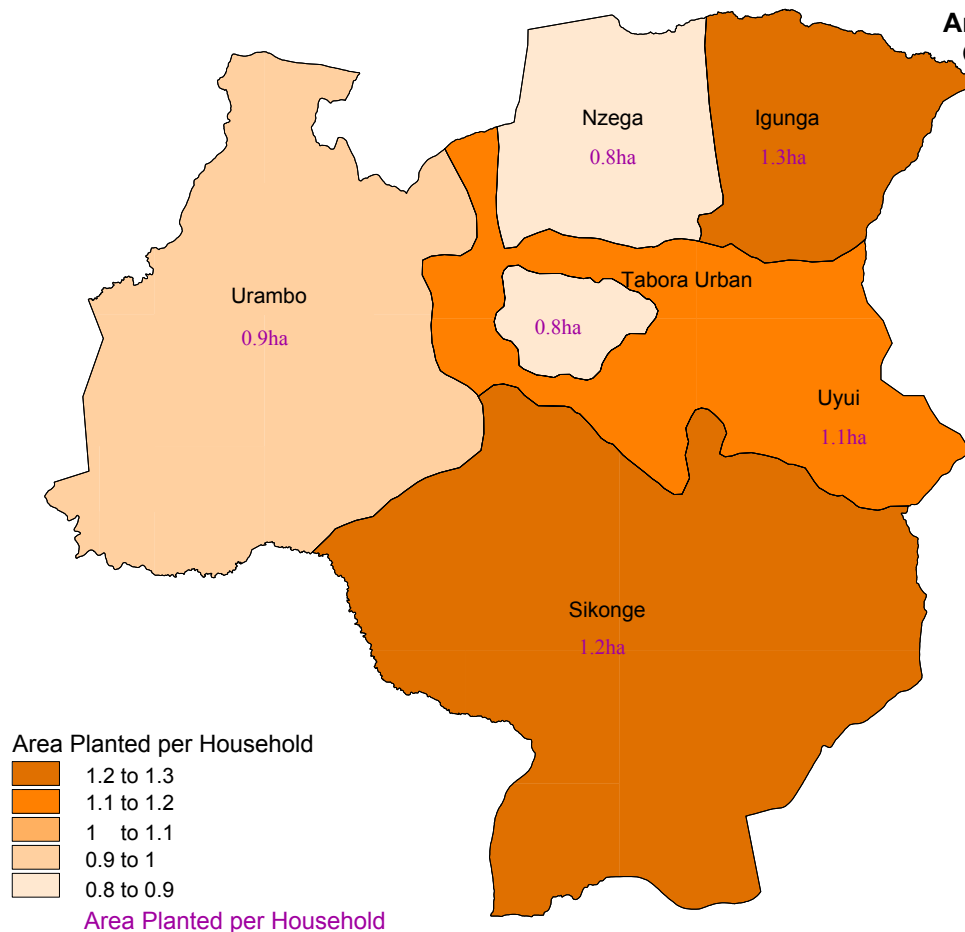
Crop	Area Planted (ha)	Quantity Harvested (tonnes)	Yield (kg/ha)
Cassava	21,391	28,416	1,328
Sweet Potatoes	9,173	12,351	1,346
Irish Potatoes	723	329	455
Yams	248	283	1,143
Total	31,535	41,380	



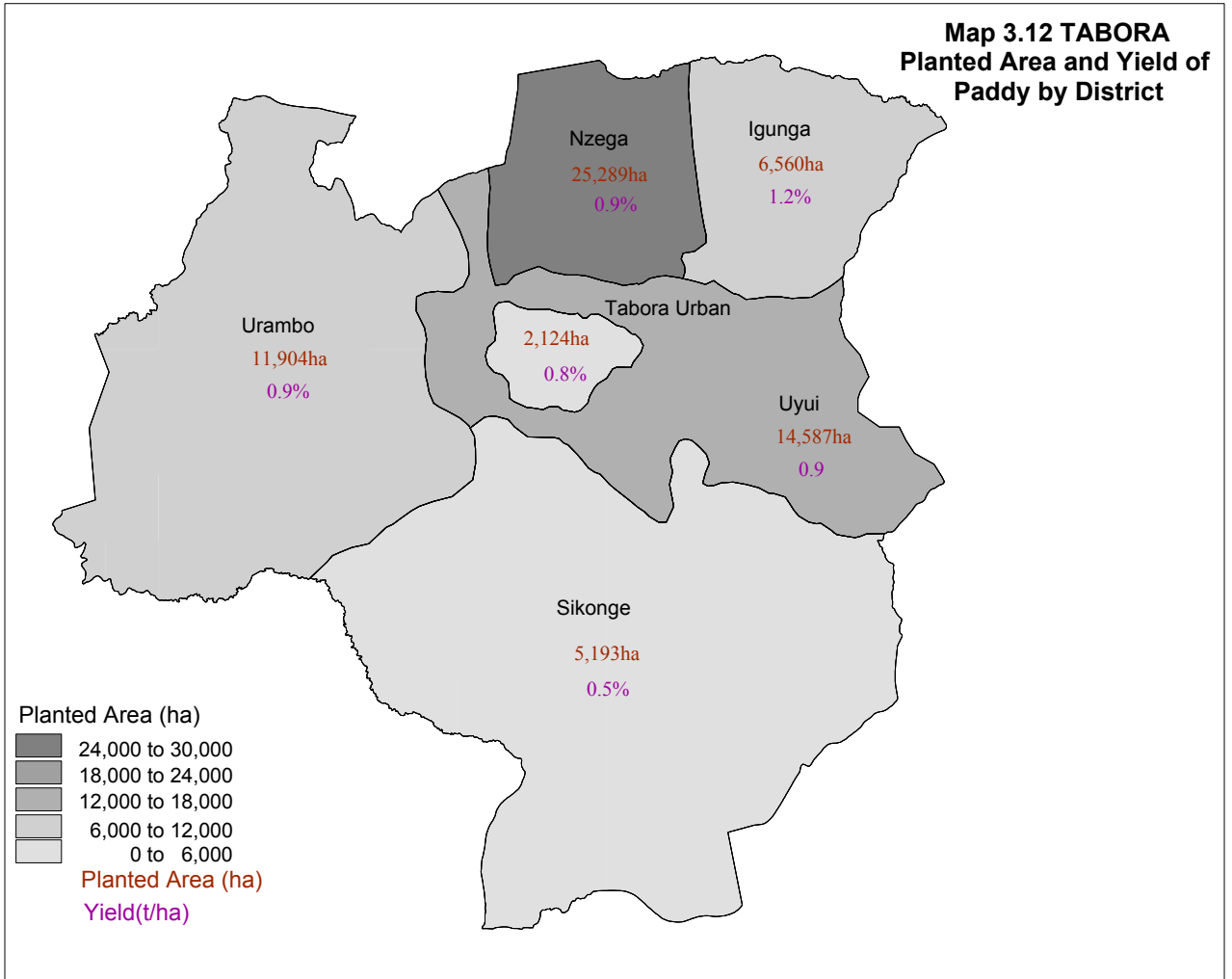
**Map 3.10 TABORA
Planted Area and Yield of
Maize by District**



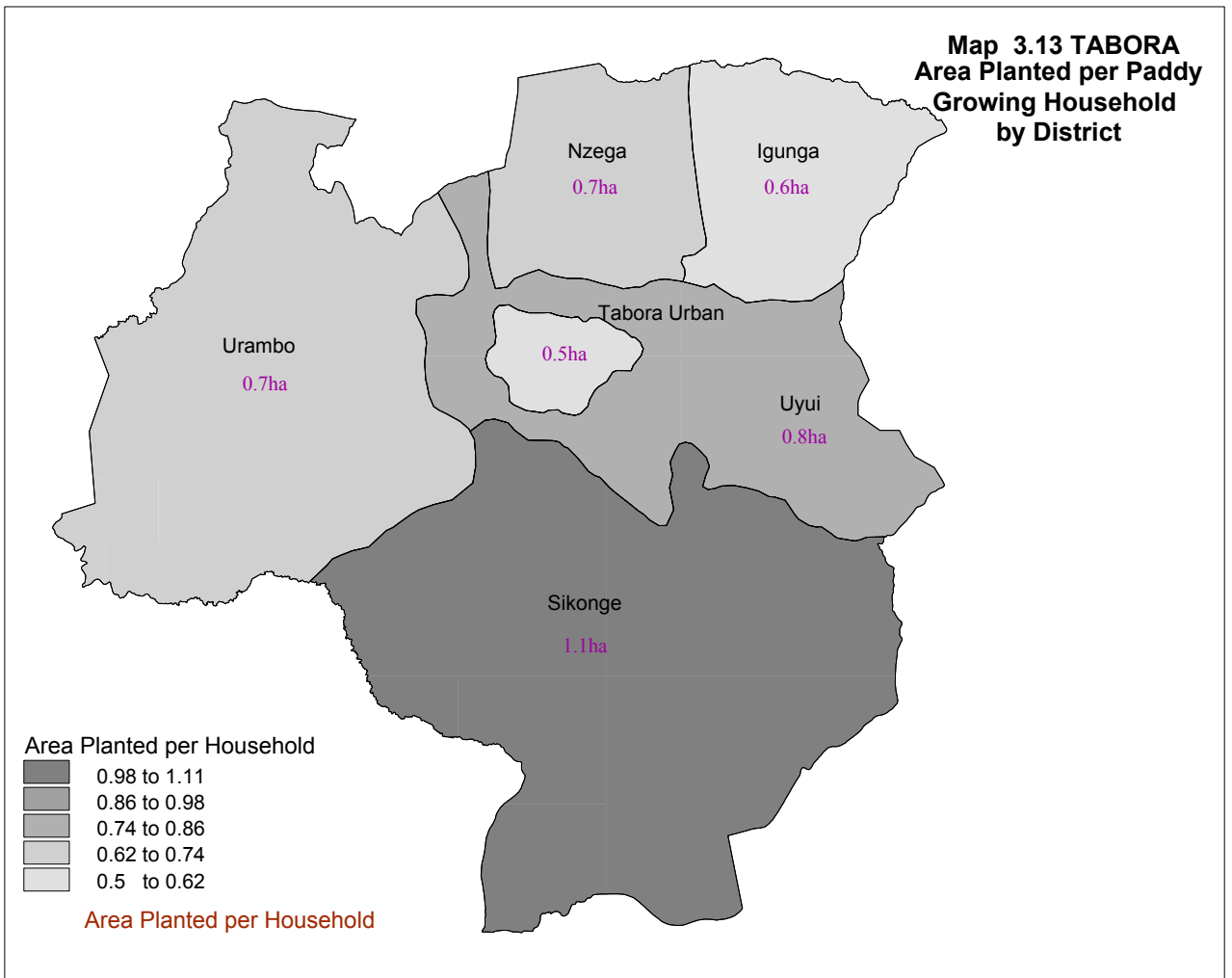
**Map 3.11 TABORA
Area Planted per Maize
Growing Household
by District**



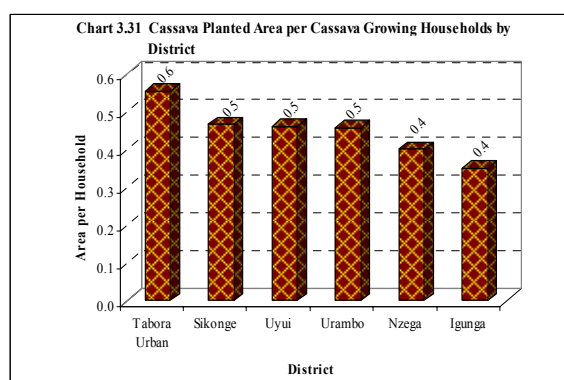
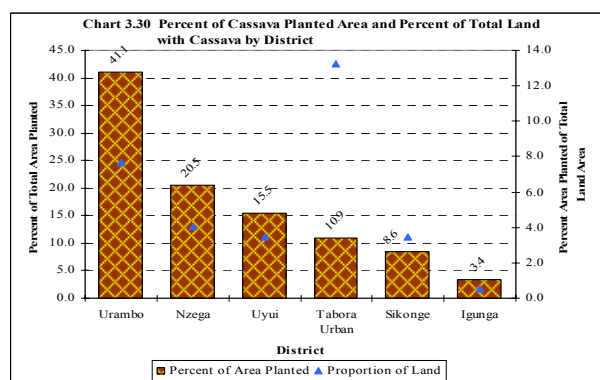
**Map 3.12 TABORA
Planted Area and Yield of
Paddy by District**



**Map 3.13 TABORA
Area Planted per Paddy
Growing Household
by District**



Previous censuses and surveys indicate that the area planted with cassava increased for the period 1994/95 to 1998/99. Since 1998/99 the area planted with cassava dropped from 40,582 ha in 1998/99 to 21,391 ha in 2002/03 (Chart 3.29). The area planted with cassava accounted for 7 percent of the total area planted with annual crops and vegetables in the census year. Urambo district had the largest planted area of cassava (8,795 ha, 41% of the cassava planted area in the region), followed by Nzega (4,388 ha, 21%), Uyui (3,316 ha, 16%), Tabora Urban (2,326 ha, 11%), Sikonge (1,829 ha, 9%) and Igunga (736 ha, 3%) (Map 3.14). However, the district with the highest proportion of land planted with cassava was Tabora Urban (13.2%). This was followed by Urambo (7.7%), Nzega (4.0%), Uyui and Sikonge (3.5% each) and Igunga (0.5%) (Chart 3.30).



The average cassava planted area per cassava growing household was 0.5 hectares. However, there were small district variations. The area planted per cassava growing household was largest in Tabora Urban (0.6 ha). This was followed by Sikonge (0.5 ha), Uyui (0.5 ha), Urambo (0.5 ha), Nzega (0.4 ha) and Igunga (0.4 ha) (Chart 3.31 and Map 3.15).

3.3.5.2 Sweet Potatoes

The number of households growing sweet potatoes in Tabora region was 27,635. The total production of sweet potatoes during the census year was 12,351 tonnes from a planted area of 9,173 hectares resulting in a yield of 1.3t/ha.

Igunga District has the largest planted area for sweet potatoes (3,639 ha, 39.7%), followed by Urambo (1,483 ha, 16.2%), Uyui (1,440 ha, 15.7%), Sikonge (1,166 ha, 12.7%), Tabora Urban (772 ha, 8.4%) and Nzega (673 ha, 7.3%). Other root and tuber crops are of minor importance in terms of area planted compared to cassava and sweet potatoes.

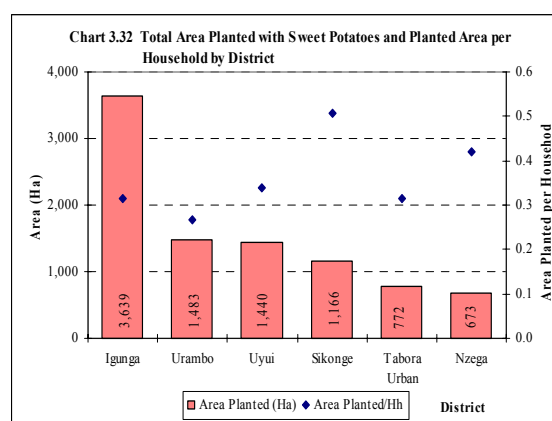


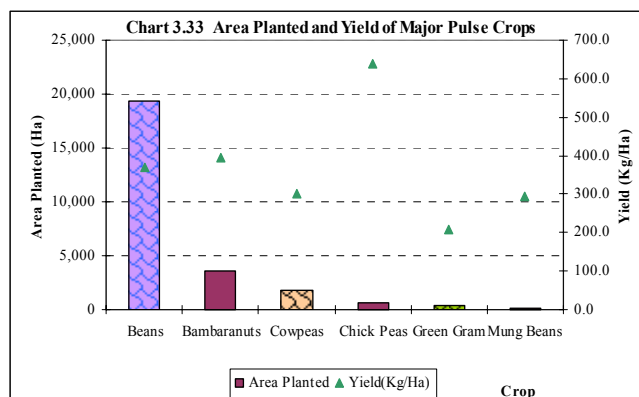
Table 3.4: Area, Quantity Harvested and Yield of Pulse Crops

Crop	Area Planted (ha)	Quantity Harvested (tonnes)	Yield (kg/ha)
Beans	19,331	7,143	369.5
Bambara nuts	3,593	1,424	396.4
Cowpeas	1,802	544	301.7
Chick Peas	682	437	640.4
Green Gram	436	91	209.2
Mung Beans	66	19	287.9
Pigeon Peas	0	0	0.0
Field Peas	0	0	0.0
Total	25,910	9,658	

3.3.6 Pulse Crops Production

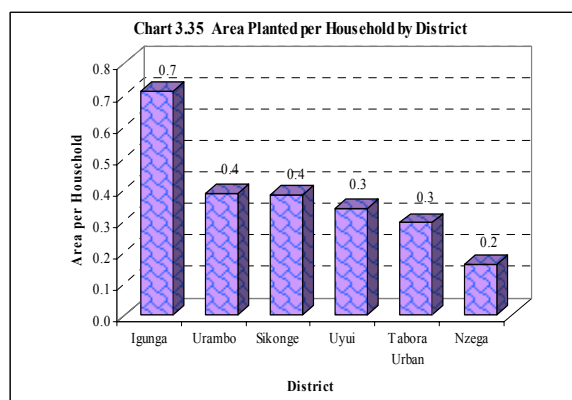
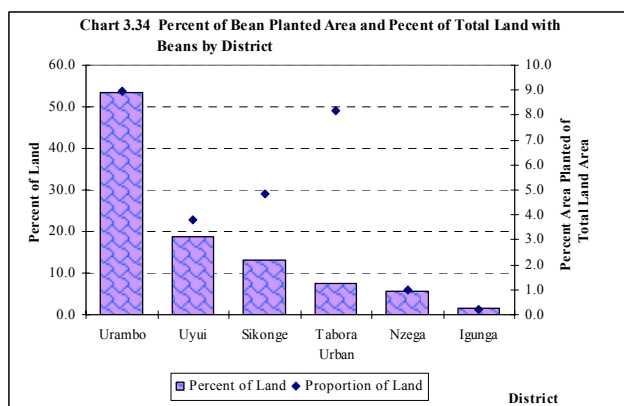
The total area planted with pulses was 25,910 hectares representing 5 percent of total area planted with annual crops out of which 19,3318 ha were planted with beans (74.6 percent of the total area planted with pulses), followed by bambara nuts (3,593 ha, 13.9%), cowpeas (1,802 ha, 7.0%), chick peas (682 ha, 2.6%), green gram (436 ha, 1.7%) and mung beans (66 ha, 0.3%). Pigeon peas and field peas were not cultivated in the region.

The total production of pulses was 9,658 tonnes. The production of beans was 7,143 tonnes and it accounted for 74 percent of the total pulse production. This was followed by bambara nuts (1,424t, 14.7%), cow peas (544t, 5.6%), chick peas (437t, 4.5%), green gram (91t, 0.9%) and mung beans (19t, 0.2%). Chick peas had a relatively higher yield of 640 kgs/ha than other pulses. The yields of the rest of the pulses in kilograms per hectare were bambara nuts 396 kgs/ha, beans 370 kgs/ha, cow peas 302 kgs/ha, mung beans 288 kgs/ha and green gram 209 kgs/ha (Chart 3,33).

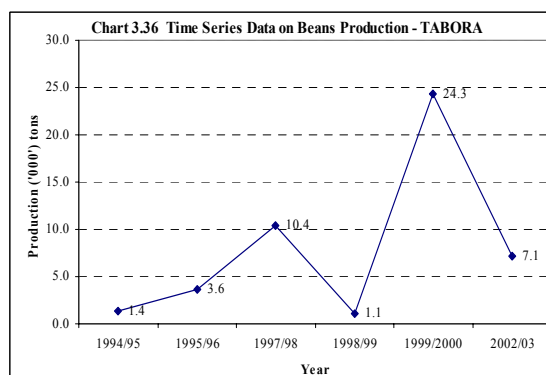


3.3.6.1 Beans

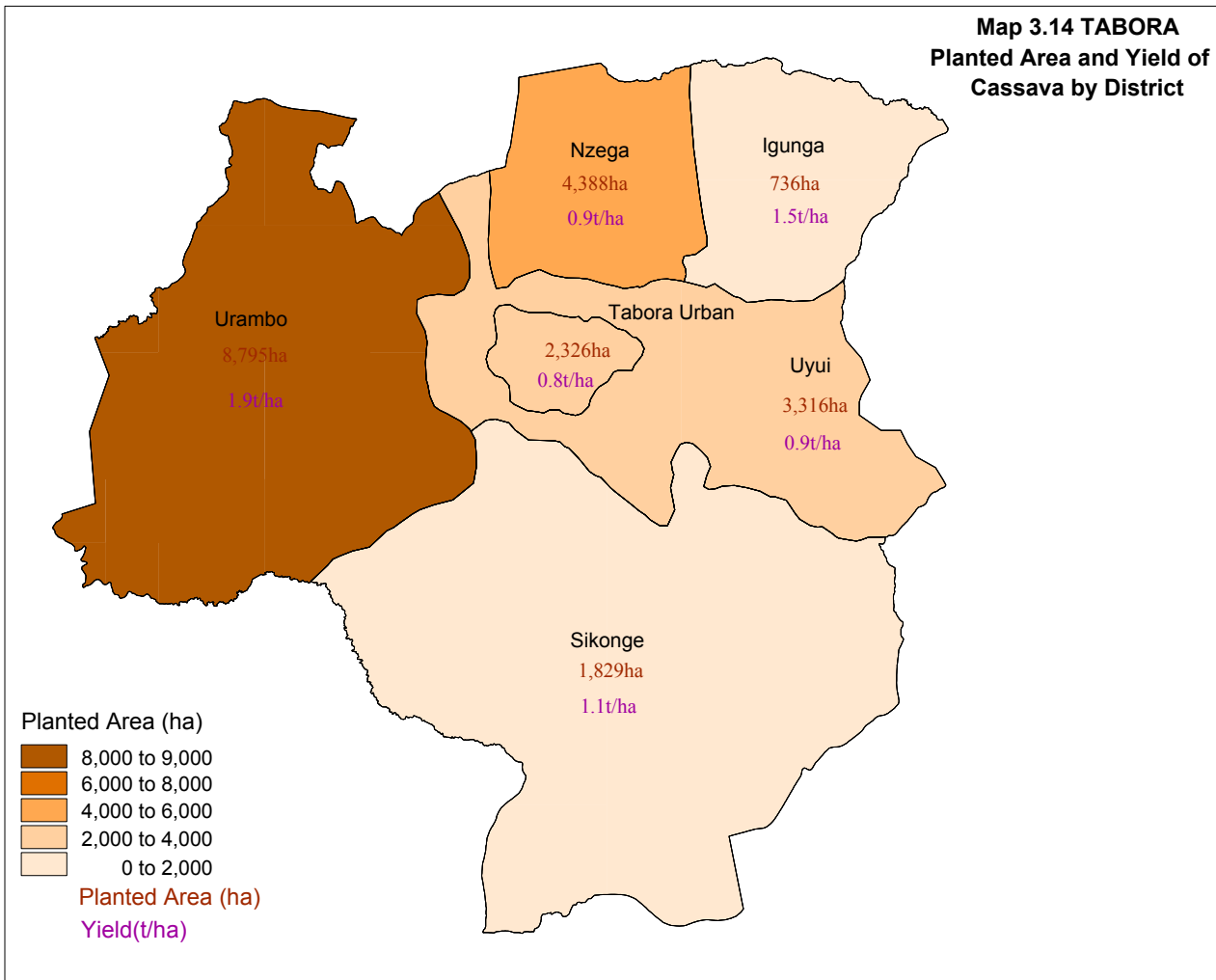
Beans dominate the production of pulse crops in the region. The number of households growing beans in Tabora region was 56,189. The total production of beans in the region was 7,143 tonnes from a planted area of 19,331 hectares resulting in a yield of 0.4 t/ha.



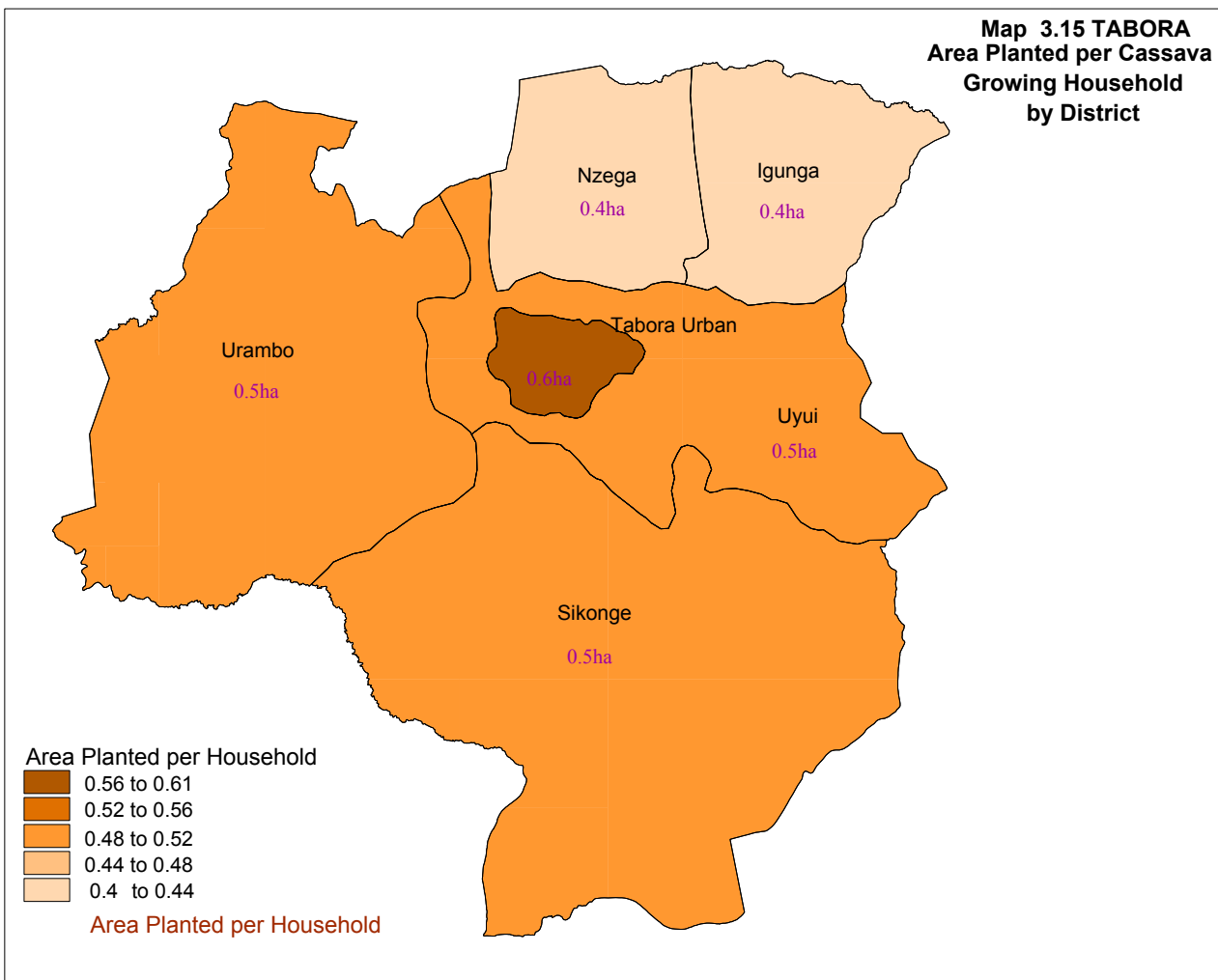
The largest area planted with beans in the region was in Urambo (10,308 ha, 53.3% of the area planted with beans in the region) (Chart 3.34 and Map 3.16), however, the largest area planted with beans per household was in Igunga district (0.7 ha) (Chart 3.35). With exception of Igunga district, the variations in area planted with beans per household for the rest of the districts were small ranging from 0.2 ha in Nzega districts to 0.4 ha in Urambo and Sikonge districts (Map 3.17). In Tabora region, bean production has increased over the period 1995 to 2003 from 1,423 tonnes in 1995 to 7,143 tonnes in 2003 (Chart 3.36).

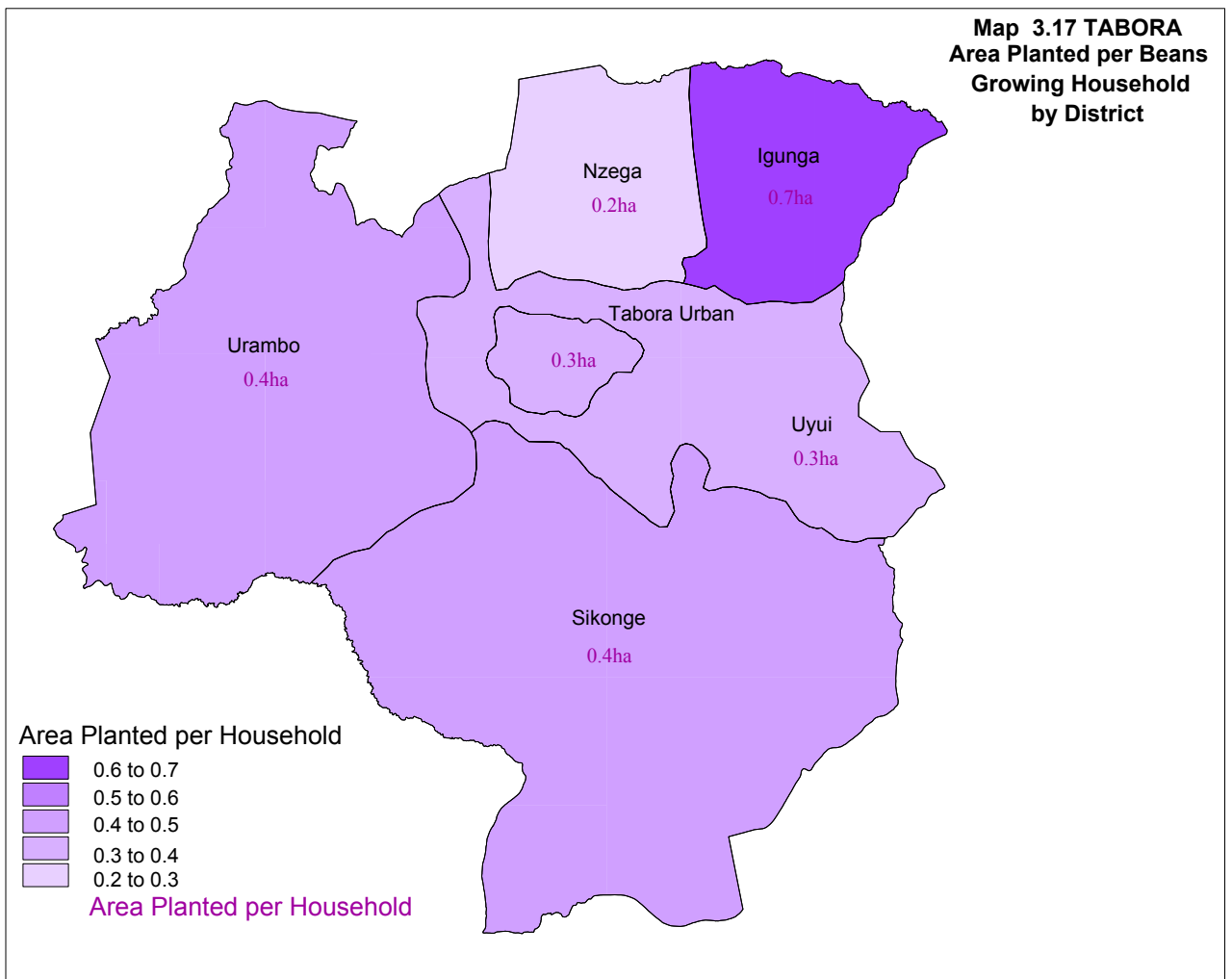
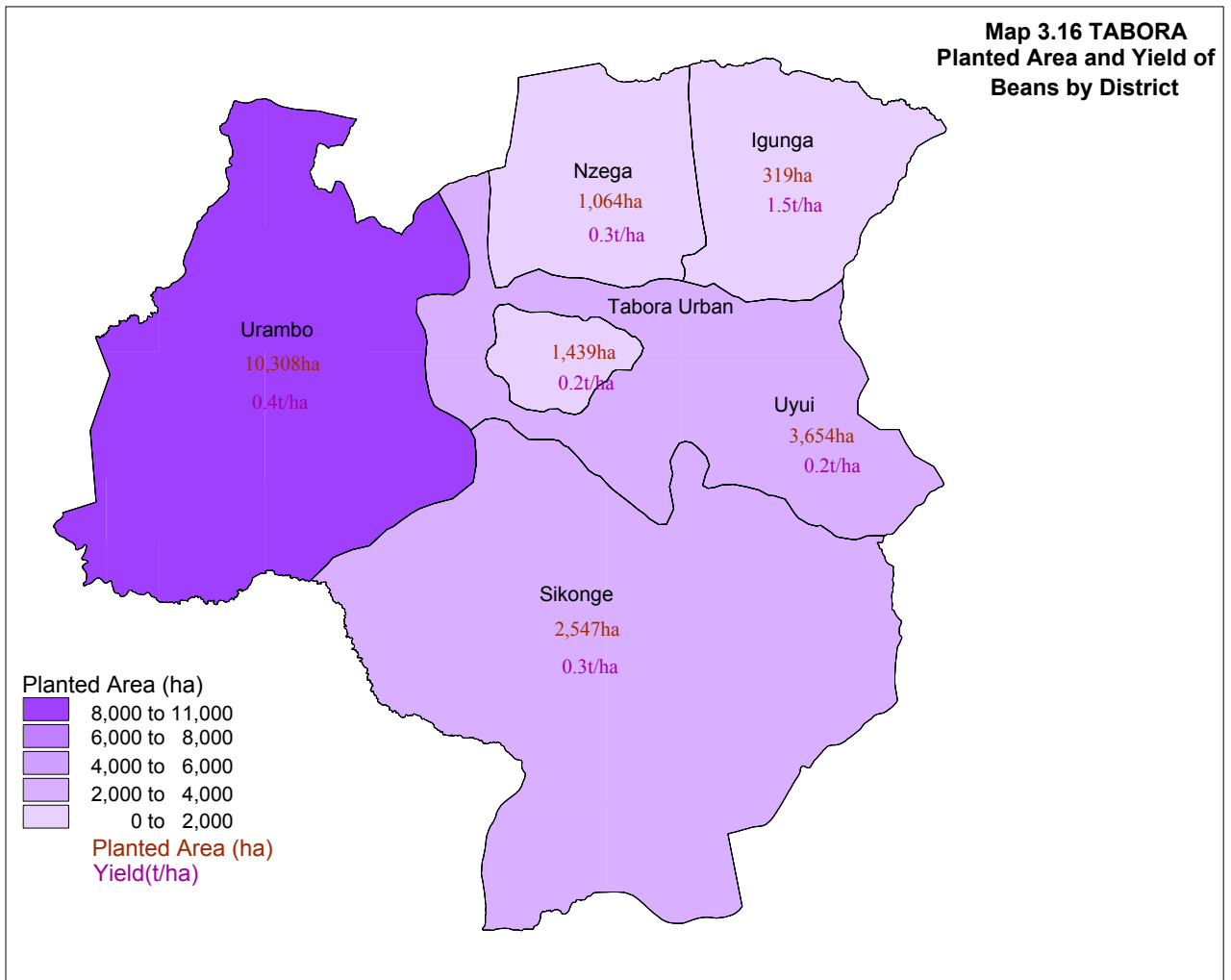


**Map 3.14 TABORA
Planted Area and Yield of
Cassava by District**



**Map 3.15 TABORA
Area Planted per Cassava
Growing Household
by District**





Charts 3.36 and 3.37 show that, whilst the area under beans production remained fairly constant the previous 4 years the quantity produced and the yield were fluctuating. The production increased rapidly in 1999/2000 due to the high yield of that year whilst the production decreased in the 2002/03 due to rapid decrease of yield (Chart 3.37).

3.3.7 Oil Seed Production

The total production of oilseed crops was 31,877 tonnes planted on an area of 69,863 hectares representing 13 percent of the total area planted with annual crops.

Groundnuts were the most important oilseeds with 68,730 ha (98.4% of the total area planted with oil seeds), followed by simsim (0.8%), sunflower (0.7%) and soya beans (0.1%) (Chart 3.38). The yield of groundnuts was 460 kg/ha. Sunflower had a yield of 292 kg/ha, soya beans of 213 kg/ha and simsim 172 kg/ha.

In terms of production, groundnuts at 31,618 tonnes, accounted for 99.2 percent of the total production of oil seeds, followed by sunflower (0.5%) and simsim (0.3%). The production of soya beans was very small while castor seeds were not produced at all.

3.3.7.1 Groundnuts

The number of households growing groundnuts in Tabora region was 143,462. The total production of groundnuts in the region was 31,618 tonnes from a planted area of 68,730 hectares resulting in a yield of 0.5 t/ha.

There was a large increase in the production of groundnuts over the period 1995 to 2003, from 9,876 tonnes in 1994/95 to 31,618 tonnes in 2002/03. The area planted increased from 12,120 hectares in 1994/95 to 32,184 hectares in 1995/96 and 68,730 hectares in 2002/03 (Chart 3.39).

Twenty nine percent of the area planted with groundnuts was located in Nzega District (19,722 ha) followed by Urambo (17,001 ha, 25%), Uyui (11,660 ha, 17%), Igunga (10,391 ha, 15%), Sikonge (7,863 ha, 11%) and Tabora Urban (2,093 ha, 3%). (Chart 3.40 and Map 3.18).

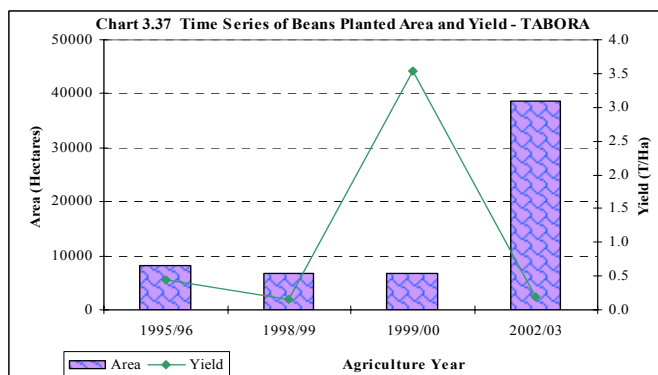
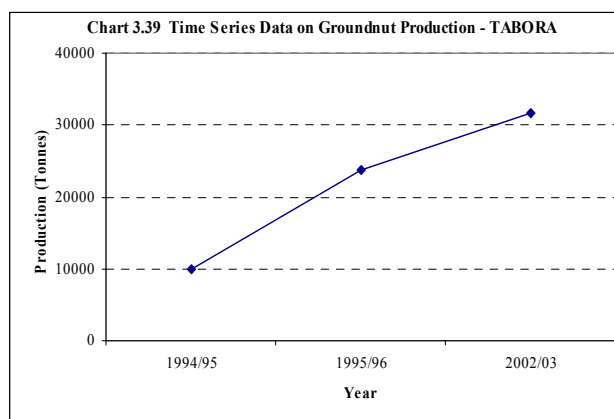
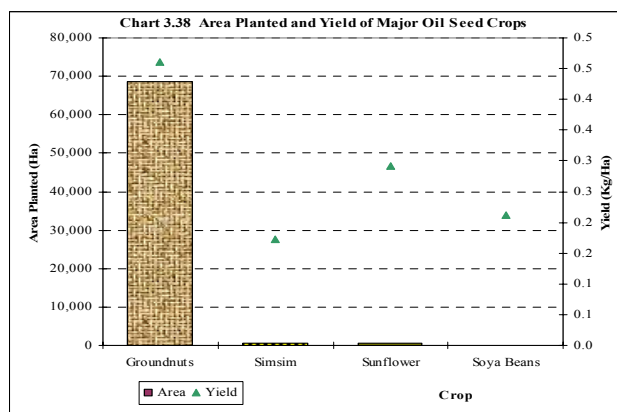


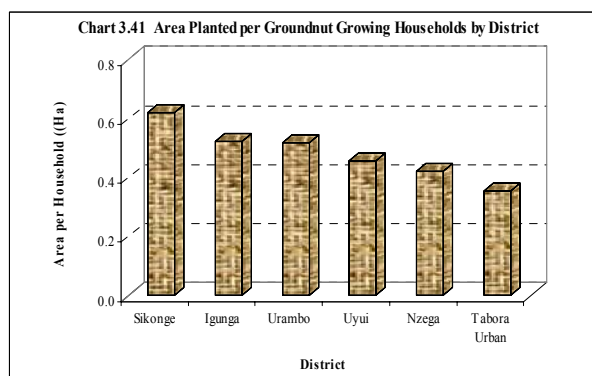
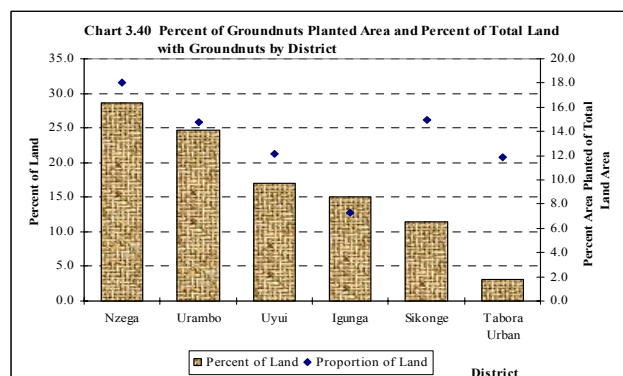
Table 3.5: Area, Quantity Harvested and Yield of Oil Seed Crops

Crop	Area Planted (ha)	Quantity Harvested (tonnes)	Yield (kg/ha)
Groundnuts	68,730	31,618	460.0
Simsim	548	94	171.9
Sunflower	510	149	291.8
Soya Beans	75	16	213.3
Total	69,863	31,877	



The highest proportion of land with groundnuts was found in Nzega followed by Sikonge, Urambo, Uyui, Tabora Urban and Igunga. planted per household depicts small variations in area planted among the districts (Chart 3.41 and Map 3.19).

The largest area planted per groundnut growing household was found in Sikonge District (0.6 ha) and the lowest was in Tabora Urban with 0.36 ha. The range between the district with the highest and the lowest area



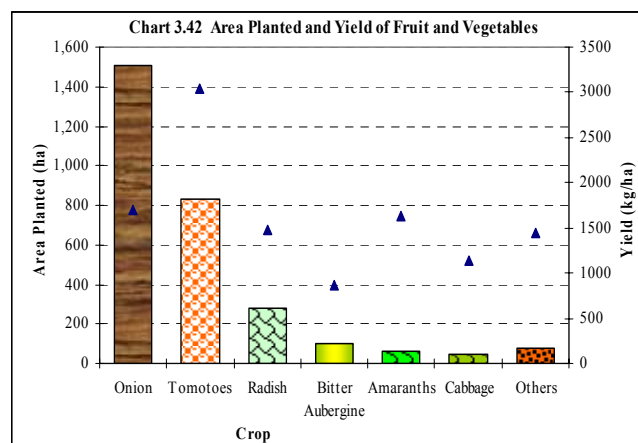
3.3.8 Fruit and Vegetables

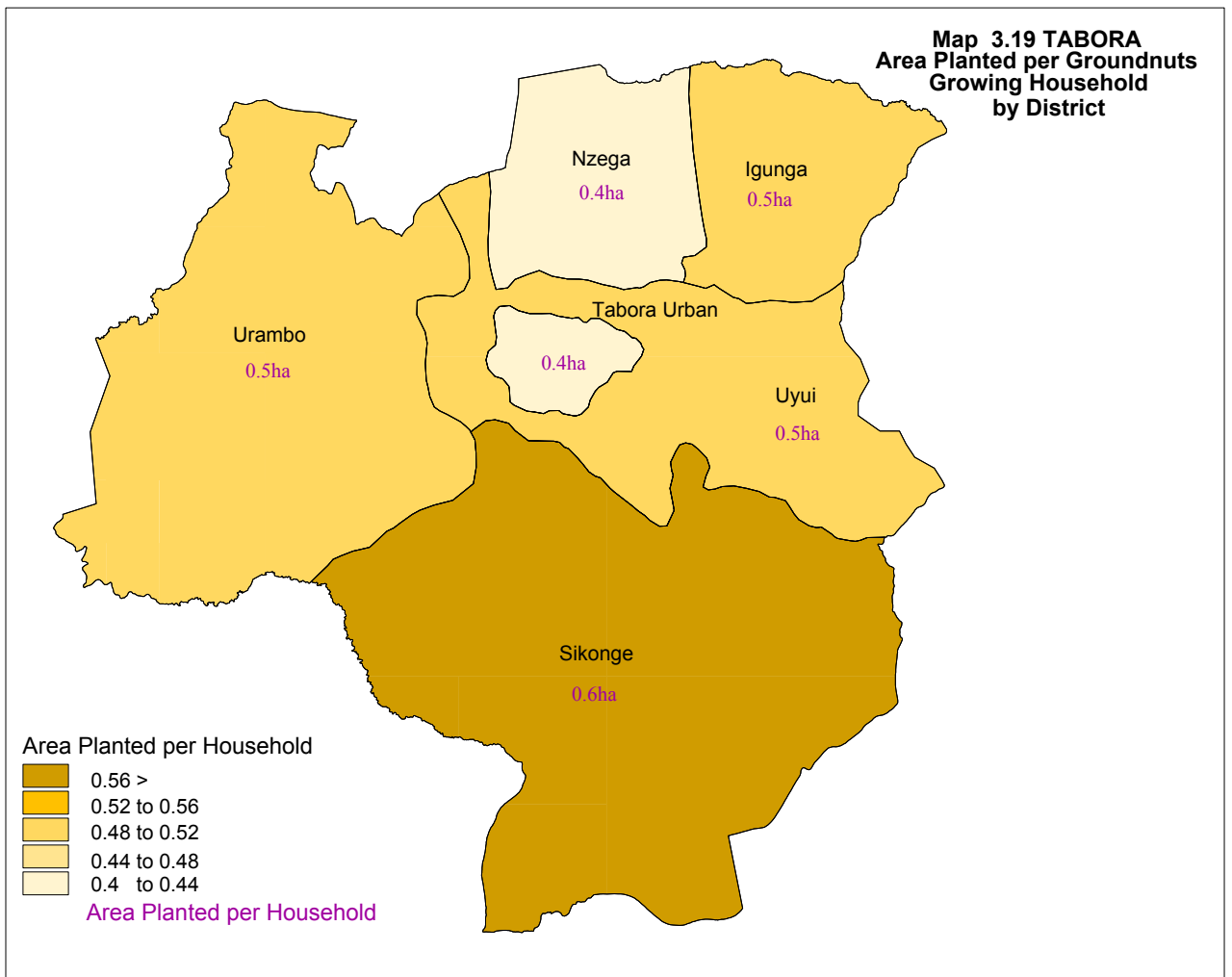
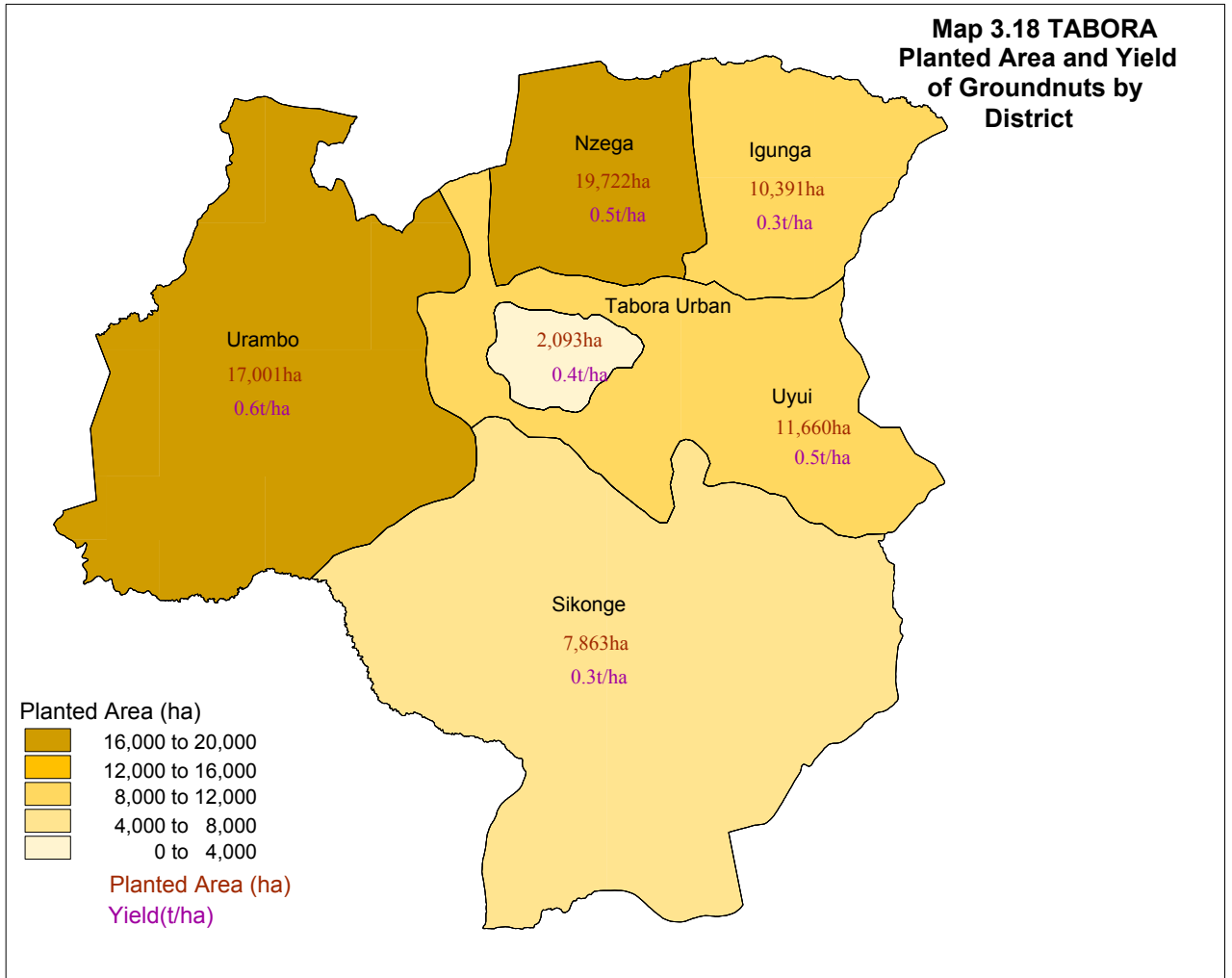
The collection of fruit and vegetables production data was difficult due to the small quantities produced per household. Most of the data presented here gives the production of smallholders who grew these crops as cash crops and not merely for household consumption. Most fruit production is from permanent crops and only water melon is reported as an annual crop in this section. Reliable historical data for time series analysis of fruit and vegetables were not available. The total production of fruits and vegetables was 5,847 tonnes. The most cultivated fruit and vegetable crop was onion with a production of 2,550 tonnes (44% of the total fruit and vegetables produced) followed by tomatoes (2,522t, 43%), radish (419t, 7%), amaranths (98t, 1.7%), bitter aubergine (85t, 1.4%) and cabbage (55t, 0.9%). The production of the other fruit and vegetables crops was relatively small (Table 3.6).

The yield of tomatoes was 3,048 kg/ha, onions (1,692 kg/ha), amaranths (1,632 kg/ha) and radish (1,480 kg/ha). Cabbages and bitter aubergine had yields of 1,140 kg/ha and 872 kg/ha respectively (Chart 3.42).

Table 3.6: Area, Quantity Harvested and Yield of Fruit and Vegetable Crops

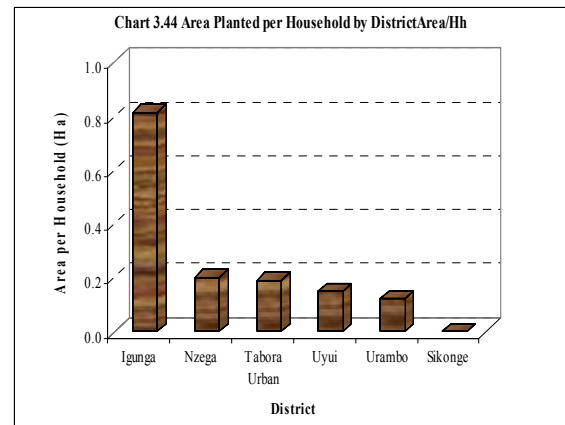
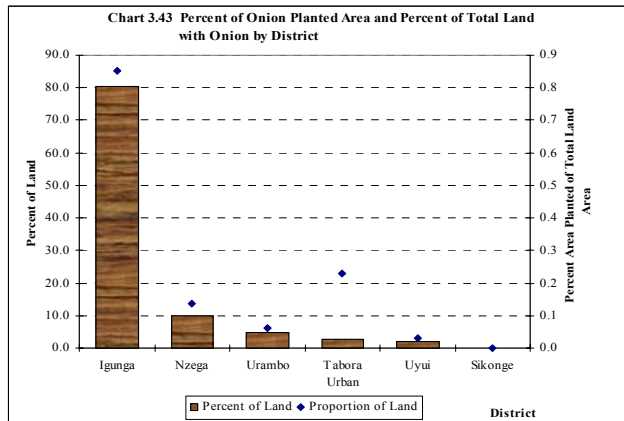
Crops	Area Planted (ha)	Quantity Harvested (tonnes)	Yield (kg./ha)
Onion	1,507	2,550	1,692
Tomatoes	827	2,522	3,048
Radish	283	419	1,480
Bitter Aubergine	97	85	872
Amaranths	60	98	1,632
Cabbage	48	55	1,140
Pumpkins	38	53	1,408
Okra	21	31	1,469
Egg Plant	12	11	865
Ginger	5	13	2,371
Cucumber	3	2	790
Chillies	1	7	5,558
Total	2,904	5,847	





3.3.8.1 Onions

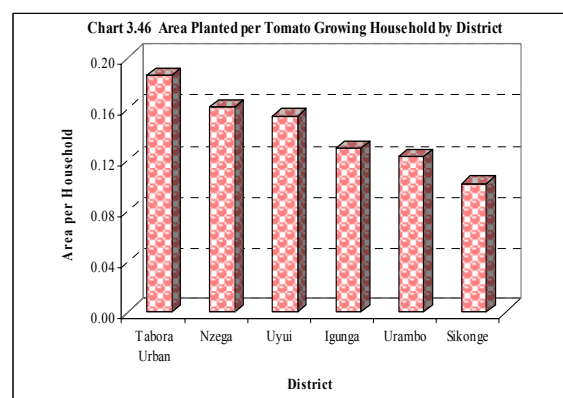
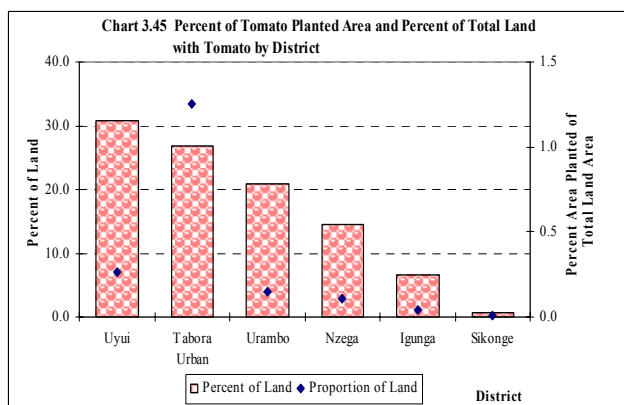
The number of households growing onion in the region was 3,250. This represented 1.4 percent of the total crop growing households. Igunga district had the largest planted area of onions (80.4% of the total area planted with tomatoes in the region), followed by Nzega (10%), Urambo (4.8%), Tabora Rural (2.7%) and Uyui (2%) (Map 3.20).



The district with the highest proportion of land under onions was Igunga, followed by Tabora Urban. With exception of Igunga district, the rest of the districts had relatively small percentages of land under onion (Chart 3.43). The largest area planted per onion growing household was found in Igunga district (0.8 ha) followed by Nzega and Tabora Urban (0.2 ha) and Uyui and Urambo (0.1 ha each) (Chart 3.44 and Map 3.21). The total area planted with onion accounted for 0.3 percent of the total area planted with annual crops in the region.

3.3.8.2 Tomatoes

The number of households growing tomatoes in the region was 5,471. This represented 2.3 percent of the total crop growing households. Uyui district had the largest planted area for tomatoes (31% of the total area planted with tomatoes in the region), followed by Tabora Urban (27%), Urambo (21%), Nzega (14%), Igunga (6%) and Sikonge (1%) (Map 3.22).

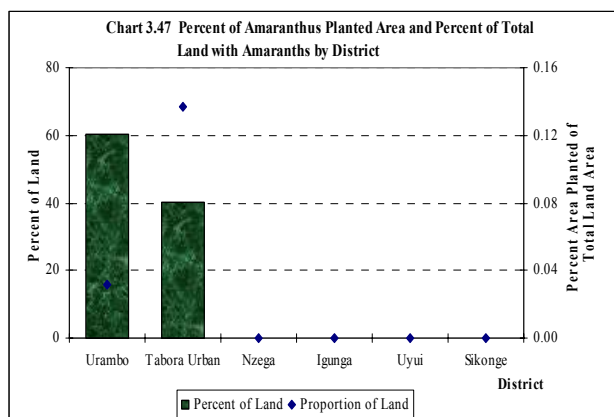


The highest proportion of land with onion was found in Tabora Urban, followed by Uyui. All the districts had relatively low percentage of land used for tomatoes production (Chart 3.45). The largest area planted per onion growing household was found in Tabora Urban district (0.19 ha) followed by Nzega (0.16 ha), Uyui (0.15 ha), Igunga (0.13 ha) Urambo (0.12 ha) and Sikonge (0.1 ha) (Chart 3.46 and Map 3.23). The total area planted with tomatoes accounted for 0.2 percent of the total area planted with annual crops in the region.

3.3.8.3 Amaranths

The number of households growing amaranths in the region was 568. This represented 0.07 percent of the total crop growing households.

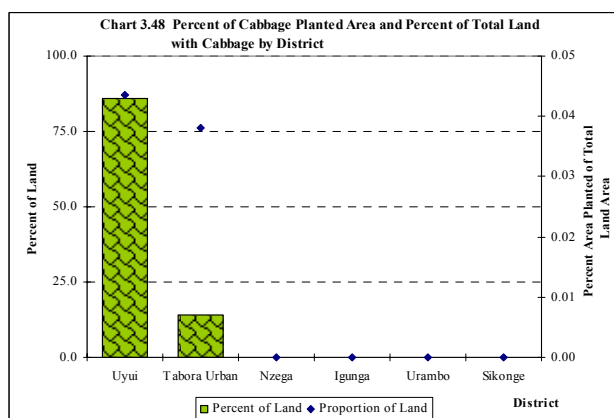
Urambo district had the largest planted area of amaranths (36 ha, 60% of the total area planted with amaranths in the region), followed by Tabora Urban (24 ha, 40%). The rest of the districts did not plant amaranths (Chart 3.47 and Map 3.24 and 3.25). The total area planted with amaranths accounted for 0.01 percent of the total area planted with annual crops in the region.



3.3.8.4 Cabbage

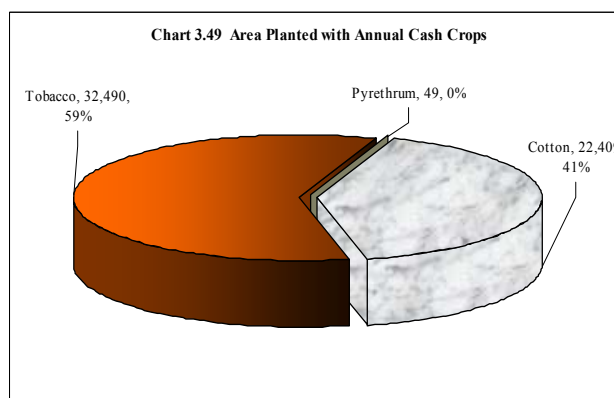
The number of households growing cabbage in the region was 246. This represented 0.10 percent of the total crop growing households.

Uyui district had the largest planted area for cabbage (42 ha, 86% of the total area planted with amaranths in the region), followed by Tabora Urban (7 ha, 14%). Rest of the districts had not planted cabbages (Chart 3.48). The total area planted with cabbage accounted for 0.01 percent of the total area planted with annual crops in the region.



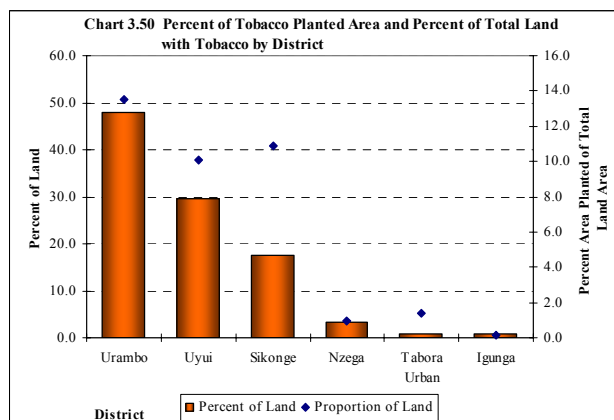
3.3.9 Other Annual Crop Production

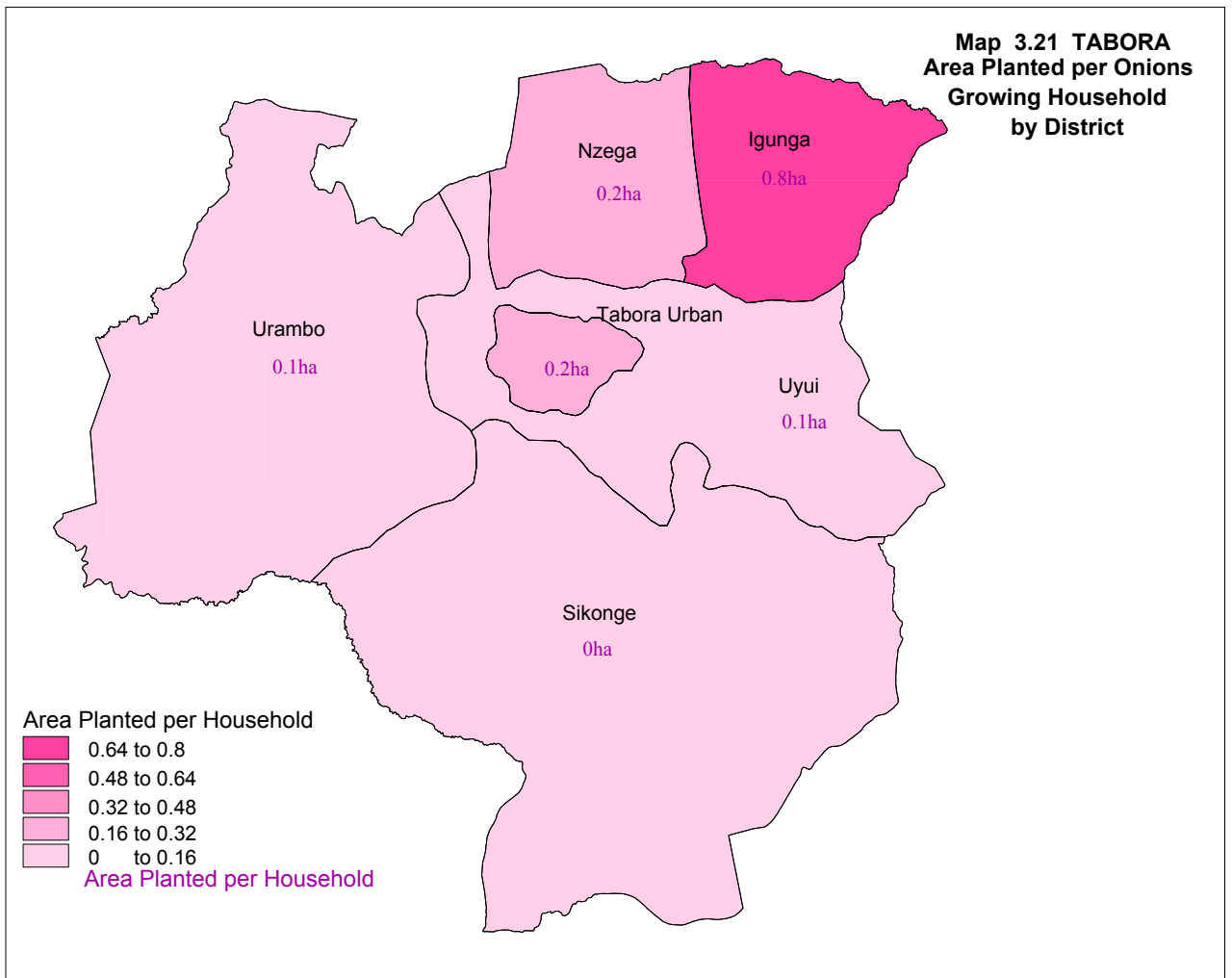
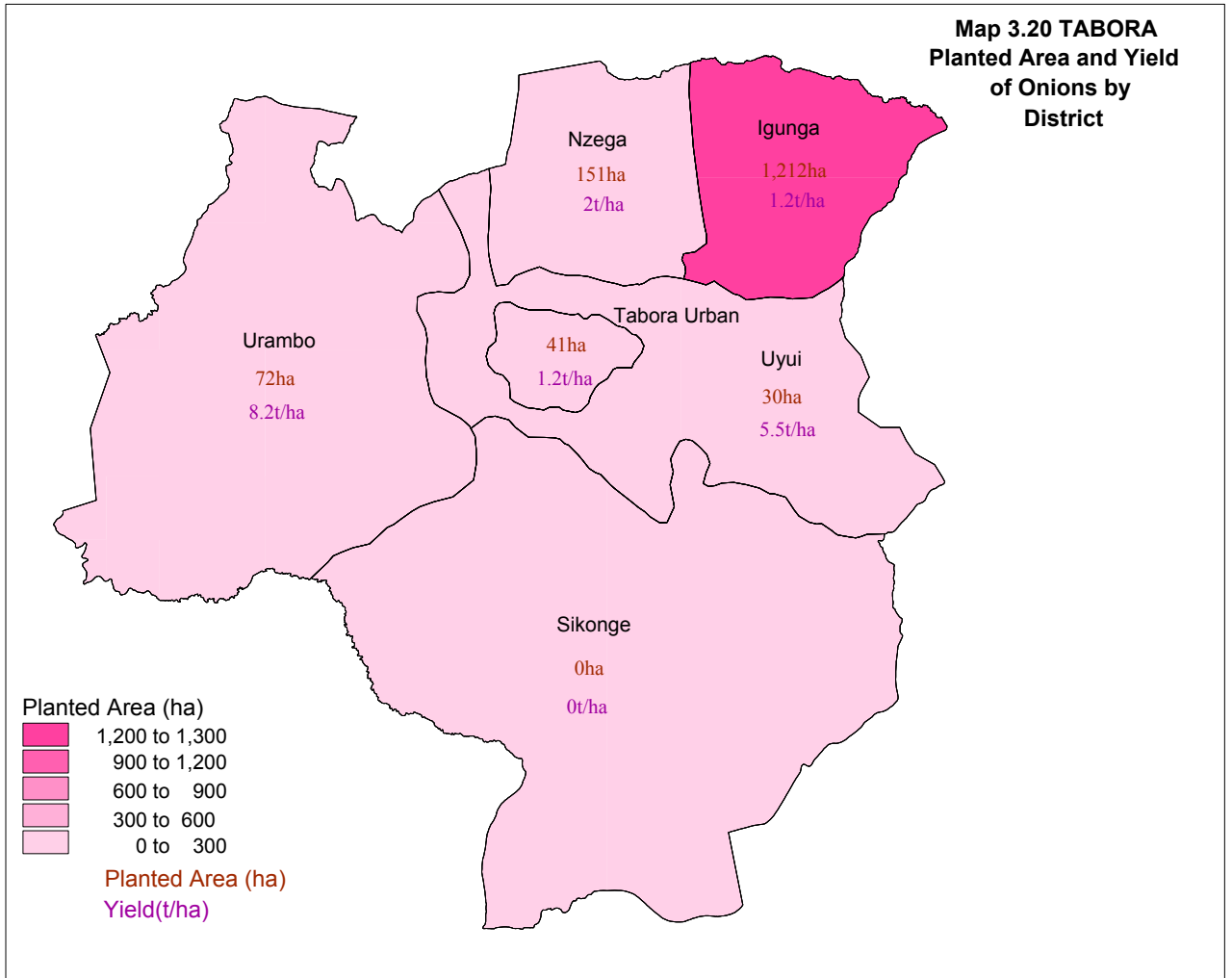
Most of the other annual crops are cash crops. Of the 54,948 ha planted with other annual crops, tobacco was the most prominent followed by cotton. Pyrethrum was also planted but area planted was very small.

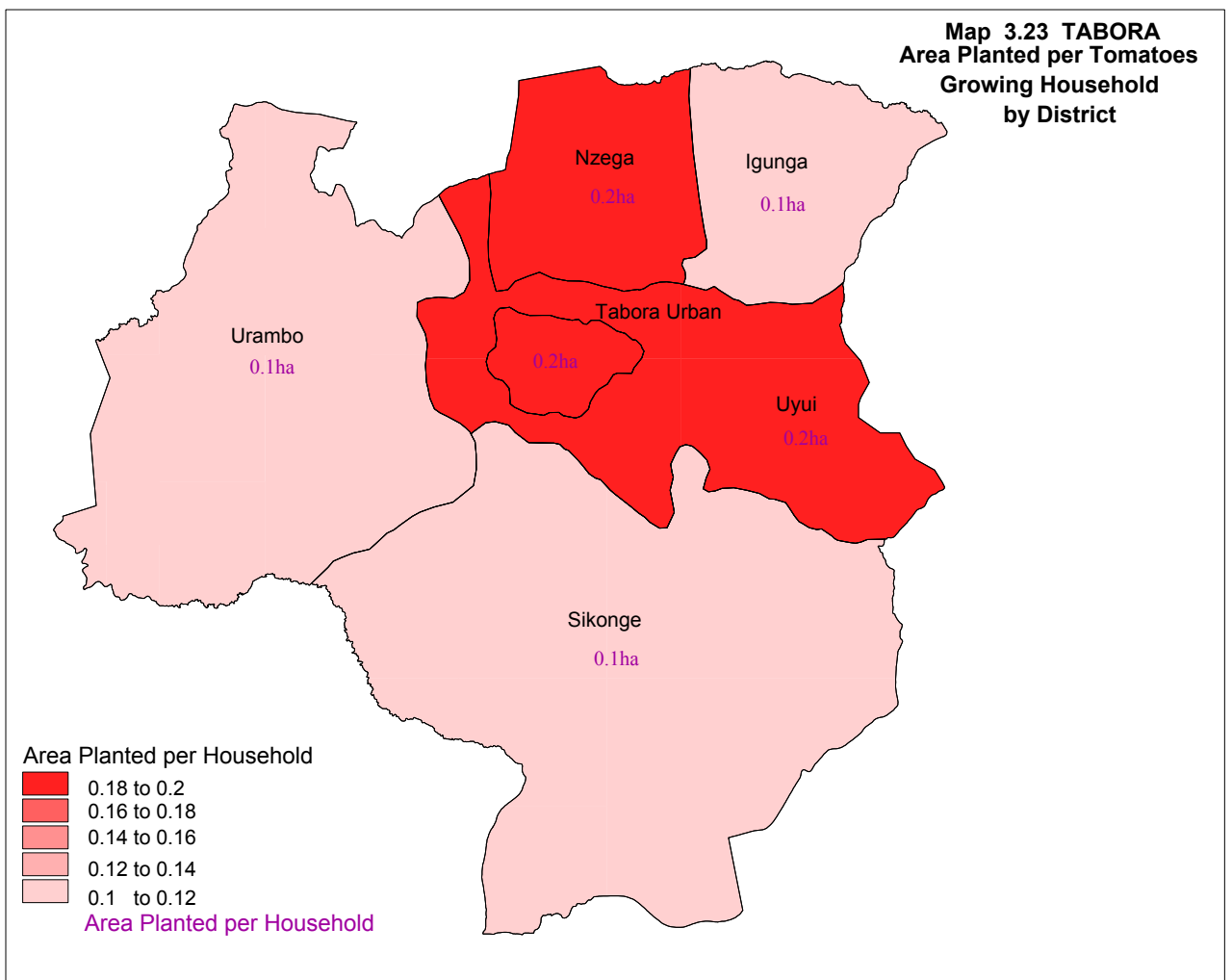
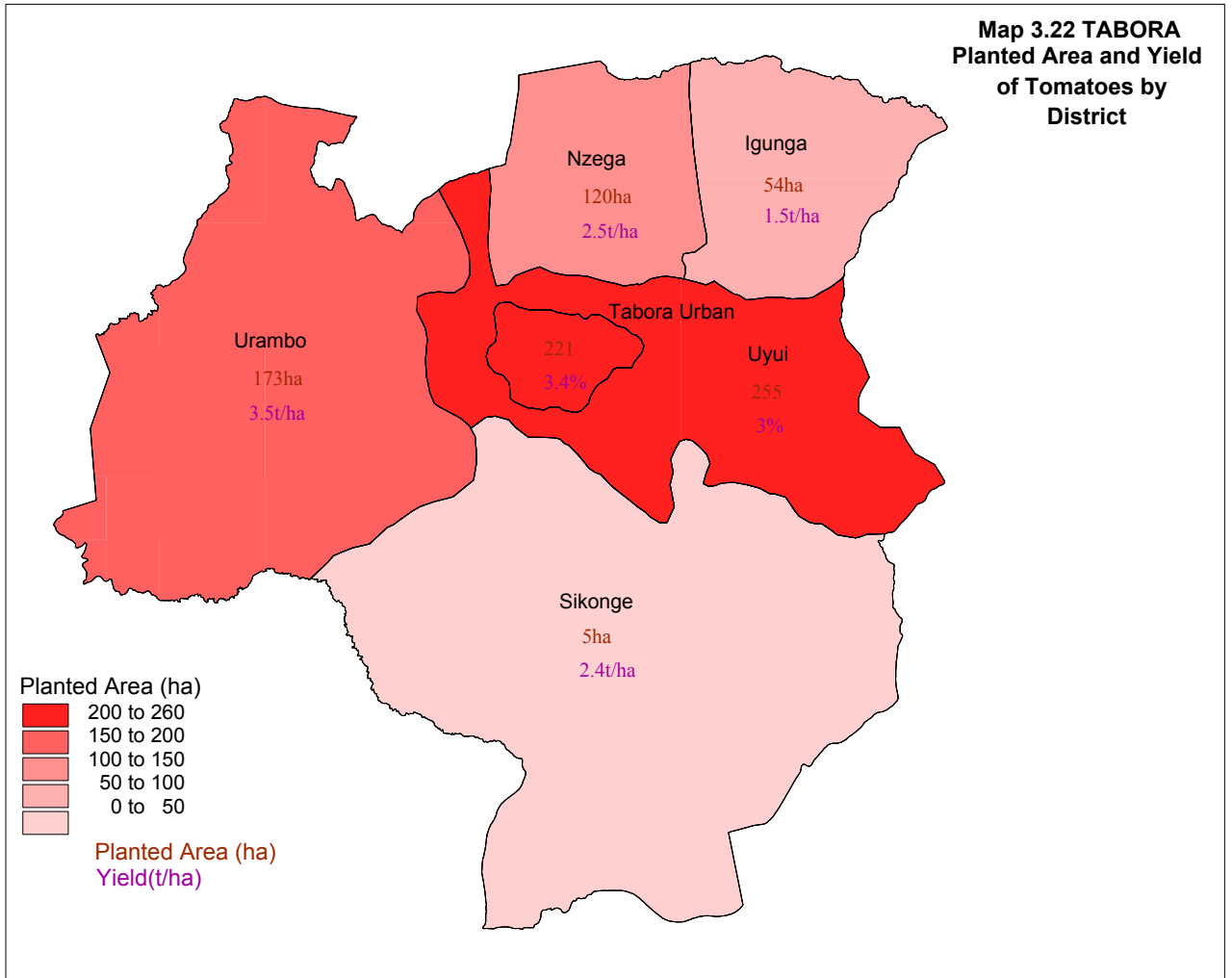


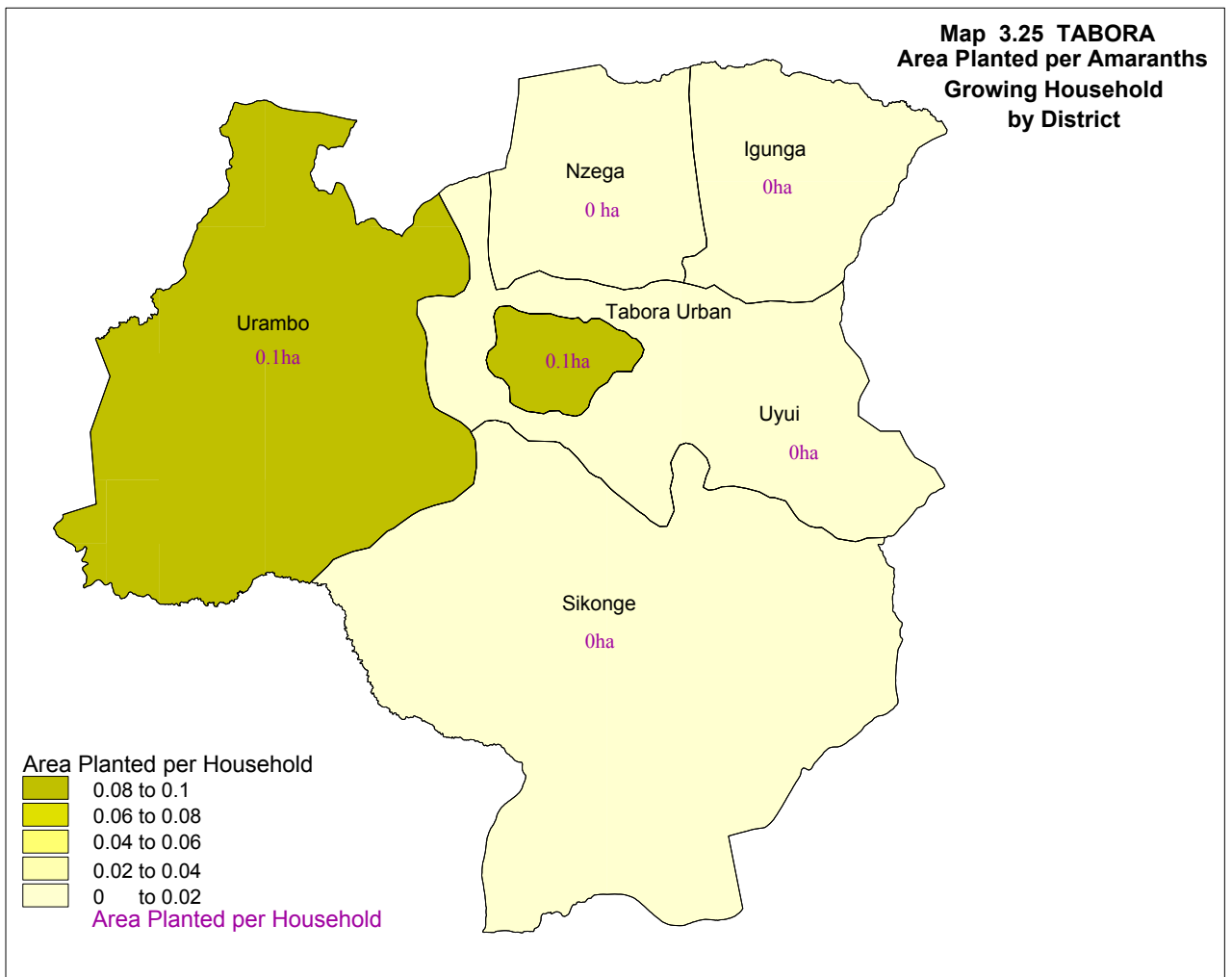
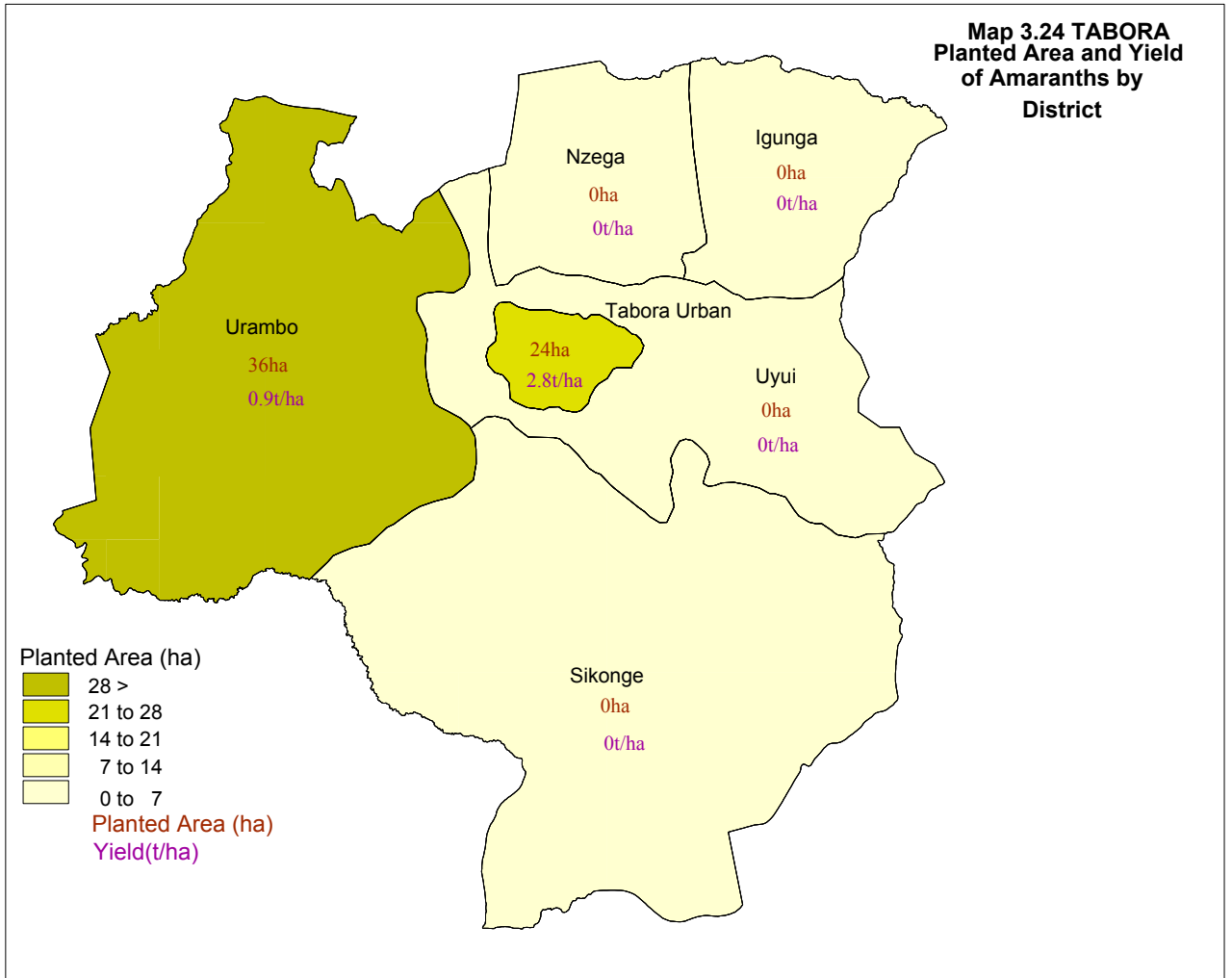
3.3.9.1 Tobacco

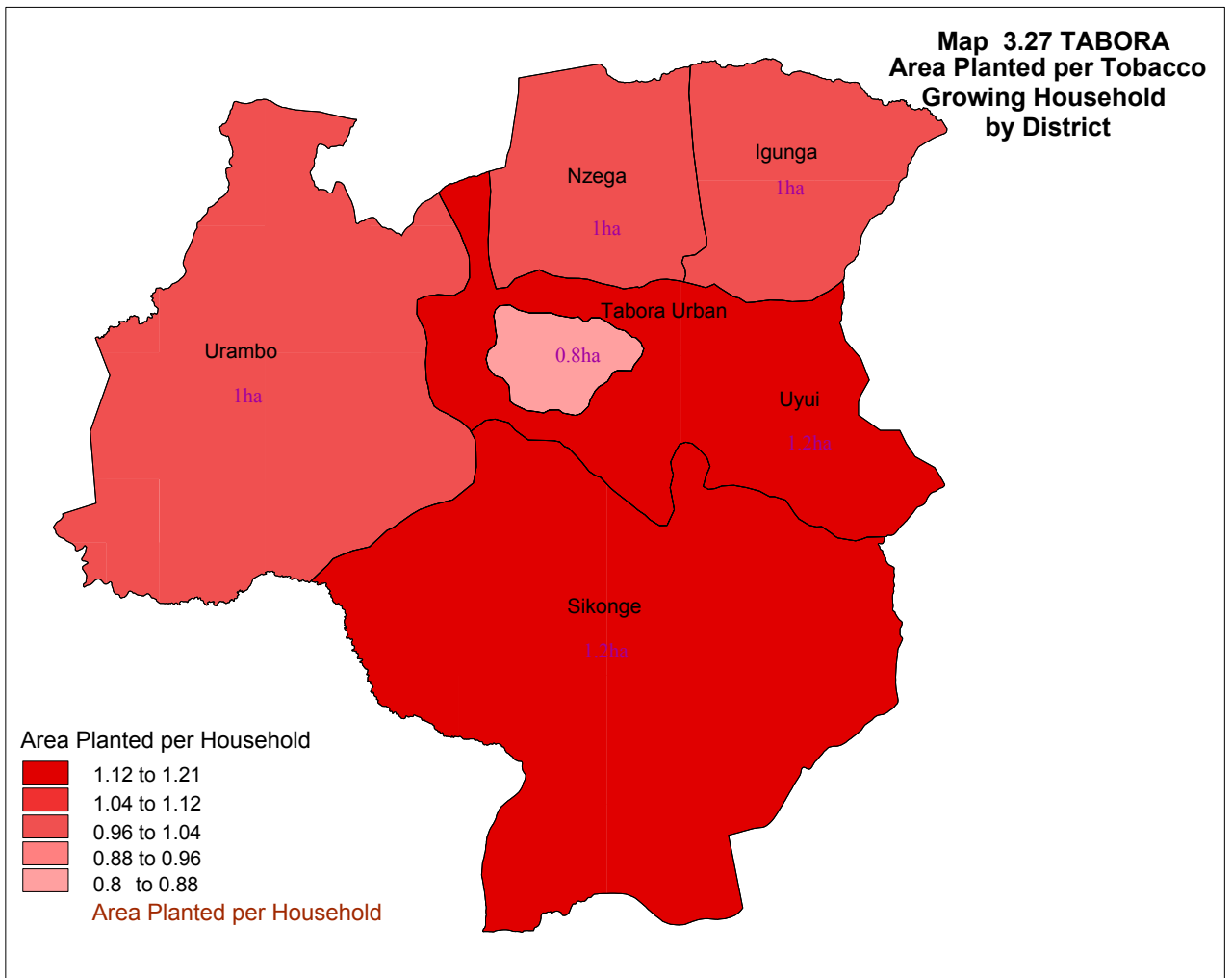
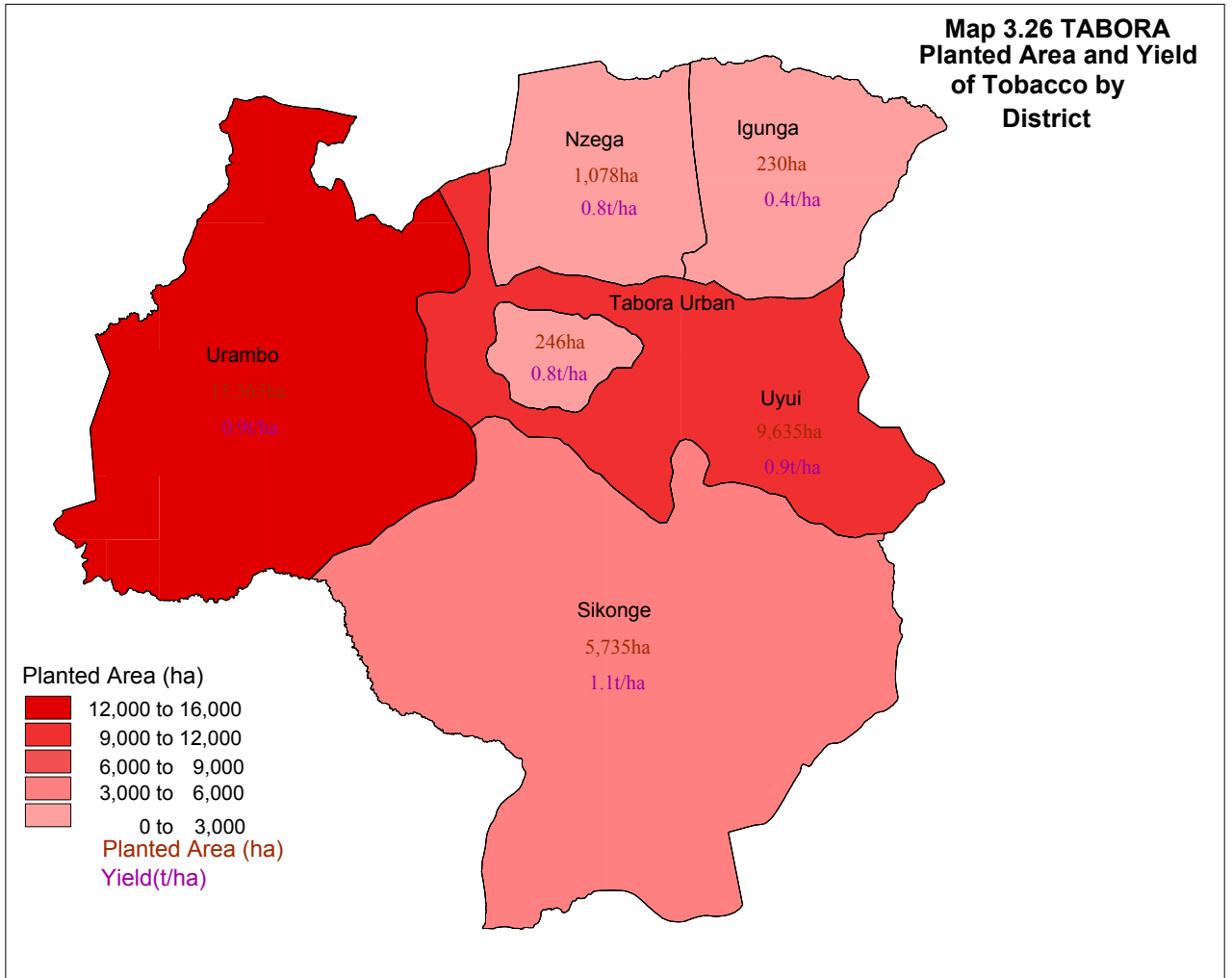
The quantity of tobacco produced was 29,613 tonnes. Tobacco had a planted area of 32,490 ha. Tobacco production was concentrated in three districts with Urambo having the largest planted area (15,565 ha, 48% of total area planted with tobacco in the region), followed by Uyui (9,635 ha, 29%), Sikonge (5,735 ha, 18%), Nzega (1,078 ha 3%), Tabora Urban (246 ha, 0.8%) and Igunga (230 ha, 0.7%) (Chart 3.50) (Map 3.26 and 3.37).











3.3.9.2 Cotton

Only 9,932 tonnes of cotton were produced in Tabora Region on a planted area of 22,409 ha. The crop was grown in four districts only (Igunga, Urambo, Nzega and Uyui). Igunga had the largest area planted with cotton (21,751 ha, 97.1%) followed by Urambo district (494 ha, 2.2%), Nzega (145 ha, 0.6%) and Uyui (19 ha, 0.1%) (Map 3.28) and an average of 1.7 ha was grown per household (Map 3.29).

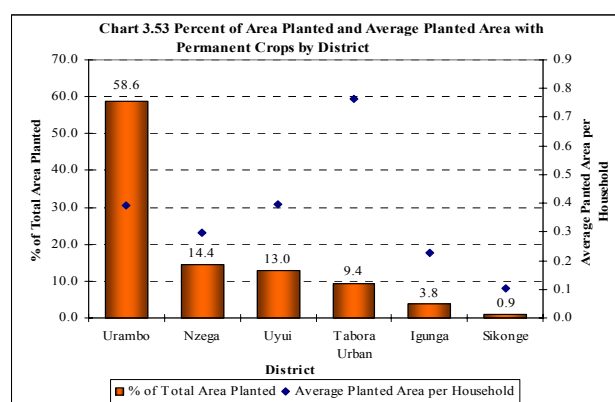
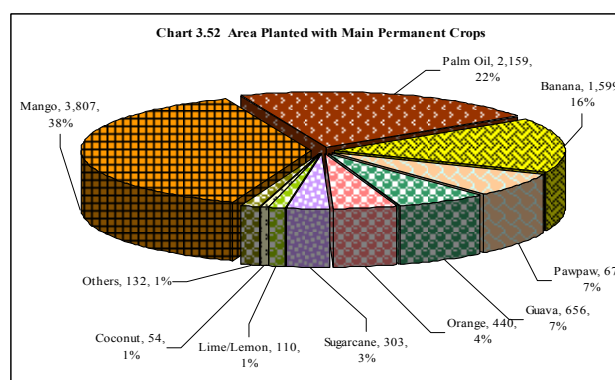
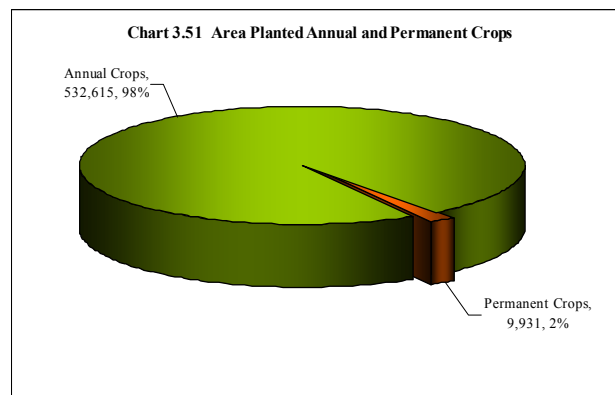
3.4 Permanent Crops

Permanent crops (sometimes referred to as perennial crops) are crops that normally take over a year to mature and once mature can be harvested for a number of years. For most crops, it is easy to determine if they are annual or permanent. However, for crops like cassava and bananas the distinction is not so clear. Cassava has varieties that mature within a year and produce only one harvest, whilst other varieties survive for more than one year and produce several harvests. In this census, cassava is treated as an annual crop. Conversely, bananas normally take less than a year to mature, survive for more than one year and are thus treated as a permanent crop. In this report the agriculture census results are presented for the most important permanent crops in terms of production, yield and area planted. Previous censuses and surveys did not measure these variables for permanent crops, therefore no time series analysis is made in this section.

The area of smallholders planted with permanent crops was 9,931 hectares (2% of the area planted with crops in the region). However, the area planted with annual crops is not the actual physical land area as it includes the area of crops planted more than once on the same land, whilst for the planted area for permanent crops is the same as physical planted land area. So the percentage of physical area planted with permanent crops would be higher than indicated in Chart 3.51.

The most important permanent crop in Tabora region is mango which accounts for a planted area of 3,807 ha, (38.3% of the planted area of all permanent crops) followed by palm oil (2,159 ha, 21.7%), banana (1,599 ha, 16.1%), pawpaw (670 ha, 6.7%) and guava (656 ha, 6.6%). All the remaining permanent crops accounted for 10.5 percent of the total area planted with permanent crops (Chart 3.52).

Urambo district had the largest area under smallholder permanent crops (5,820 ha, 58.6%). This is followed by Nzega (1,429 ha, 14.4%), Uyui (1,287 ha, 13%), Tabora Urban (932 ha, 9.4%), Igunga (327 ha, 3.8%) and Sikonge (85 ha, 0.9%). However, Tabora Urban had the largest area per permanent crop growing household (0.8 ha) followed by Urambo and Uyui (0.4 ha), Nzega (0.3 ha) and Sikonge (0.1 ha) (Chart 3.53).

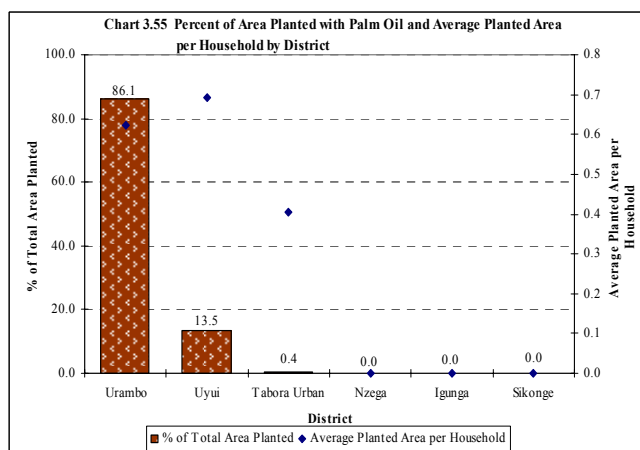
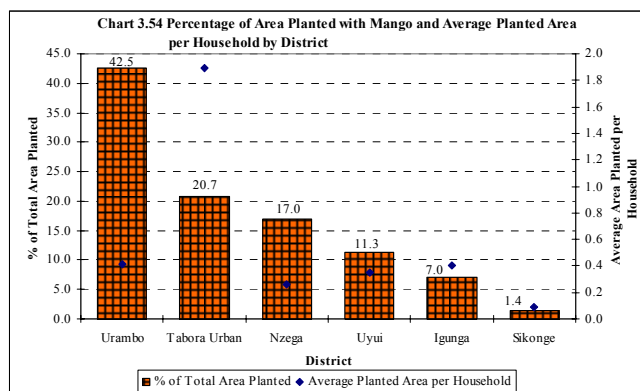


In terms of area of permanent crops planted expressed as a percentage of the total area planted with crops per district, Tabora Urban had the highest percent (5.0%) followed by Urambo (4.8%), Igunga (1.3%), Uyui (1.3%), Nzega (0.3%) and Sikonge (0.2%).

3.4.1 Mango

The total production of mangoes by smallholders was 20,763 tonnes. In terms of area planted, mango was the most important permanent crop grown by smallholders in the region. They were grown by 9,338 households (4% of the total crop growing households). The average area planted with mangoes per household was relatively small at around 0.4 ha per mangoes growing household and the average yield obtained by smallholders was 45,600 kg/ha from a harvest area of 455 hectares.

Urambo had the largest area of mangoes in the region (1,618 ha, 42.5%) followed by Tabora Urban (788 ha, 20.7%), Nzega (649 ha, 17.0%), Uyui (432 ha, 11.3%), Igunga (268 ha, 7.0%) and Sikonge (53 ha, 1.4%) (Map 3.30). However, the average area planted with mangoes per mango growing household was highest in Tabora Urban (1.9 ha) followed by Urambo, Uyui and Igunga (0.4 ha each), Nzega (0.3 ha) and Sikonge (0.1 ha) (Chart 3.54 and Map 3.31).



3.4.2 Palm Oil

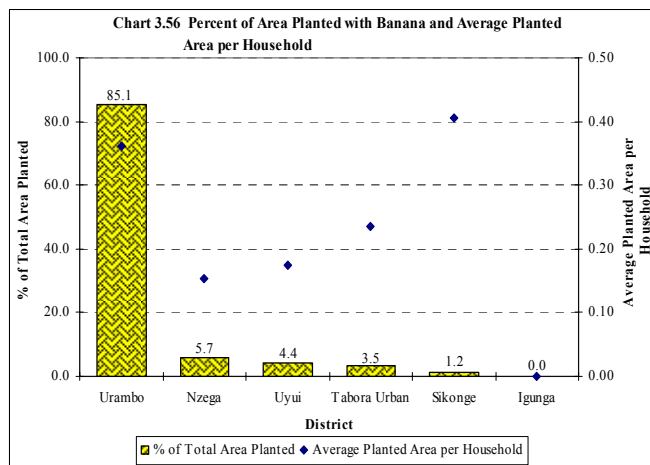
The total production of palm oil by smallholders was 416 tonnes. In terms of area planted, palm oil was the second most important permanent crop grown by smallholders in the region. It was grown by 3,425 households (1.5% of the total crop growing households). The average area planted with palm oil per household was at around 0.6 ha per palm oil growing household and the average yield obtained by smallholders was 3,525 kg/ha from a harvest area of 118 hectares.

Urambo had the largest area of palm oil in the region (1,858 ha, 86.1%) followed by Uyui (291 ha, 13.5%) and Tabora Urban (10 ha, 0.4%). Palm oil production was not reported in the rest of the districts (Map 3.32). However, the average area planted with palm oil per palm oil planting household was highest in Uyui (0.7 ha) followed by Urambo (0.6 ha) and Tabora Urban (0.4 ha) (Chart 3.55 and Map 3.33).

3.4.3 Banana

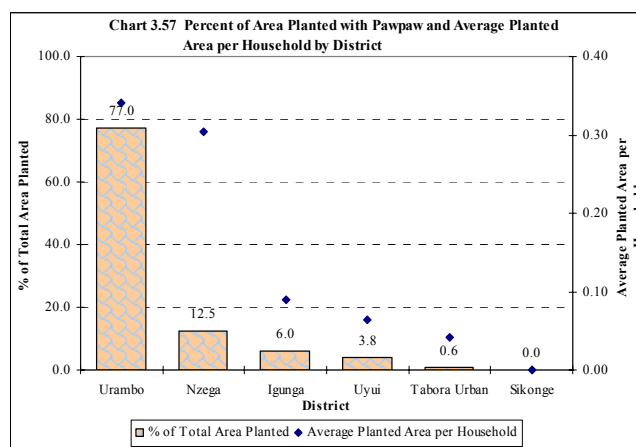
The total production of banana by smallholders was 2,616 tonnes. In terms of area planted, banana was the third most important permanent crop grown by smallholders in the region. It was grown by 5,058 households (2.1% of the total crop growing households). The average area planted with banana per household was relatively small at around 0.32 ha per banana growing household and the average yield obtained by smallholders was 5,300 kg/ha from a harvested area of 490 hectares.

Urambo had the largest planted area of bananas in the region (1,362 ha, 85.2%) followed by Nzega (92 ha, 5.7%), Uyui (70 ha, 4.4%), Tabora Urban (56 ha, 3.5%) and Sikonge (19 ha, 1.2%). Banana was not planted in Igunga (Map 3.34). However, the area planted with banana per banana growing household was highest in Sikonge (0.40 ha), followed by Urambo (0.36 ha), Tabora Urban (0.24 ha), Uyui (0.17 ha) and Nzega (0.15 ha) (Chart 3.56 and Map 3.35).

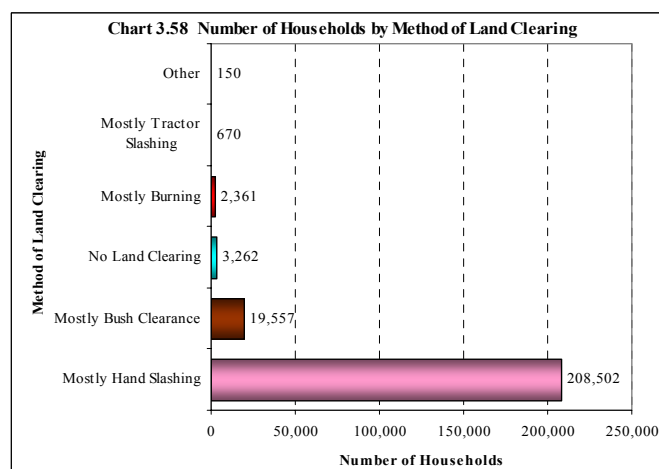


3.4.4 Pawpaw

The total production of pawpaw by smallholders was 926 tonnes. In terms of area planted, pawpaw was the fourth most important permanent crop grown by smallholders in the region. It was grown by 2,745 households (0.4% of the total crop growing households). The average area planted with pawpaw per household was relatively small at around 0.2 ha per pawpaw growing household and the average yield obtained by smallholders was 4,700 kg /ha from a harvest area of 197 hectares.



Urambo has the largest area of pawpaw in the region (516 ha, 77.1%) followed by Nzega (84 ha, 12.6%), Igunga (40 ha, 6.0%), Uyui (25 ha, 3.7%) and Tabora (4 ha, 0.6%) (Map 3.36). The average area planted per pawpaw growing household was highest in Urambo (0.34 ha), followed by Nzega (0.30 ha), Igunga (0.09 ha), Uyui (0.06 ha) and Tabora Urban (0.04 ha) (Map 3.37). Sikonge district reported no pawpaw production.



3.5 Input/Implement Use

3.5.1 Methods of Land Clearing

Land clearing is a common pre-tillage operation practiced by most farmers in the region. Land clearing is divided into two categories: bush clearing, which by definition implies either expansion into virgin areas or into areas which have been left fallow for a long period while the other category, which includes burning, hand slashing or tractor slashing, is normally an annual clearing exercise to remove vegetation growth from the previous season.

Hand slashing is the most widely used method for land clearing. The area cleared by hand slashing in the region was 451,452 ha which represented 88.5 percent of the total planted area. Burning and tractor slashing are less important methods for land clearing and they represented 0.9 and 0.3 percent respectively (Table 3.7).

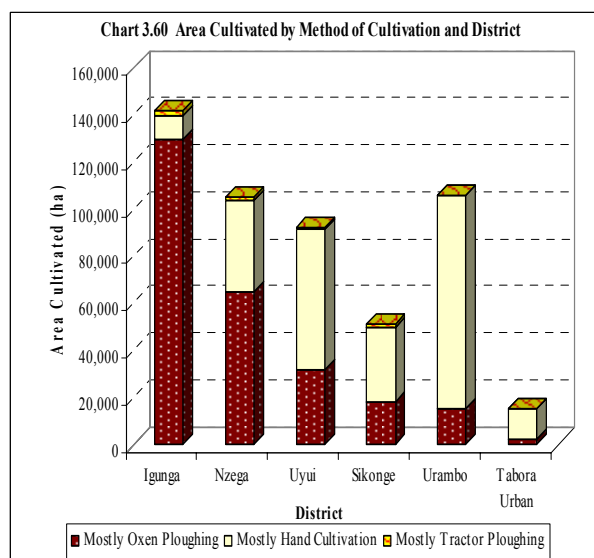
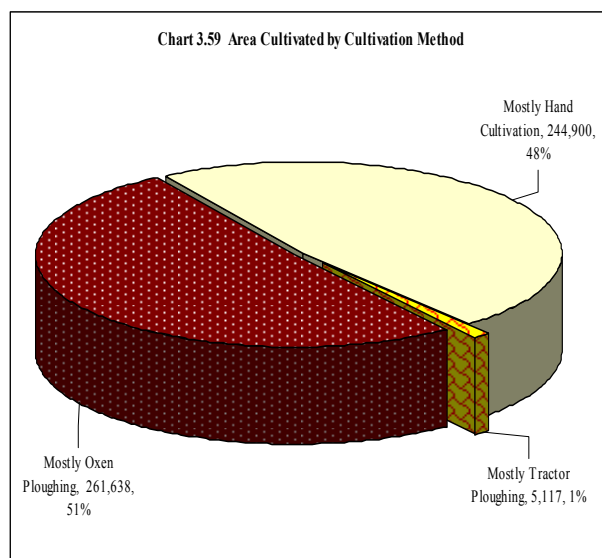
Table 3.7: Land Clearing Methods

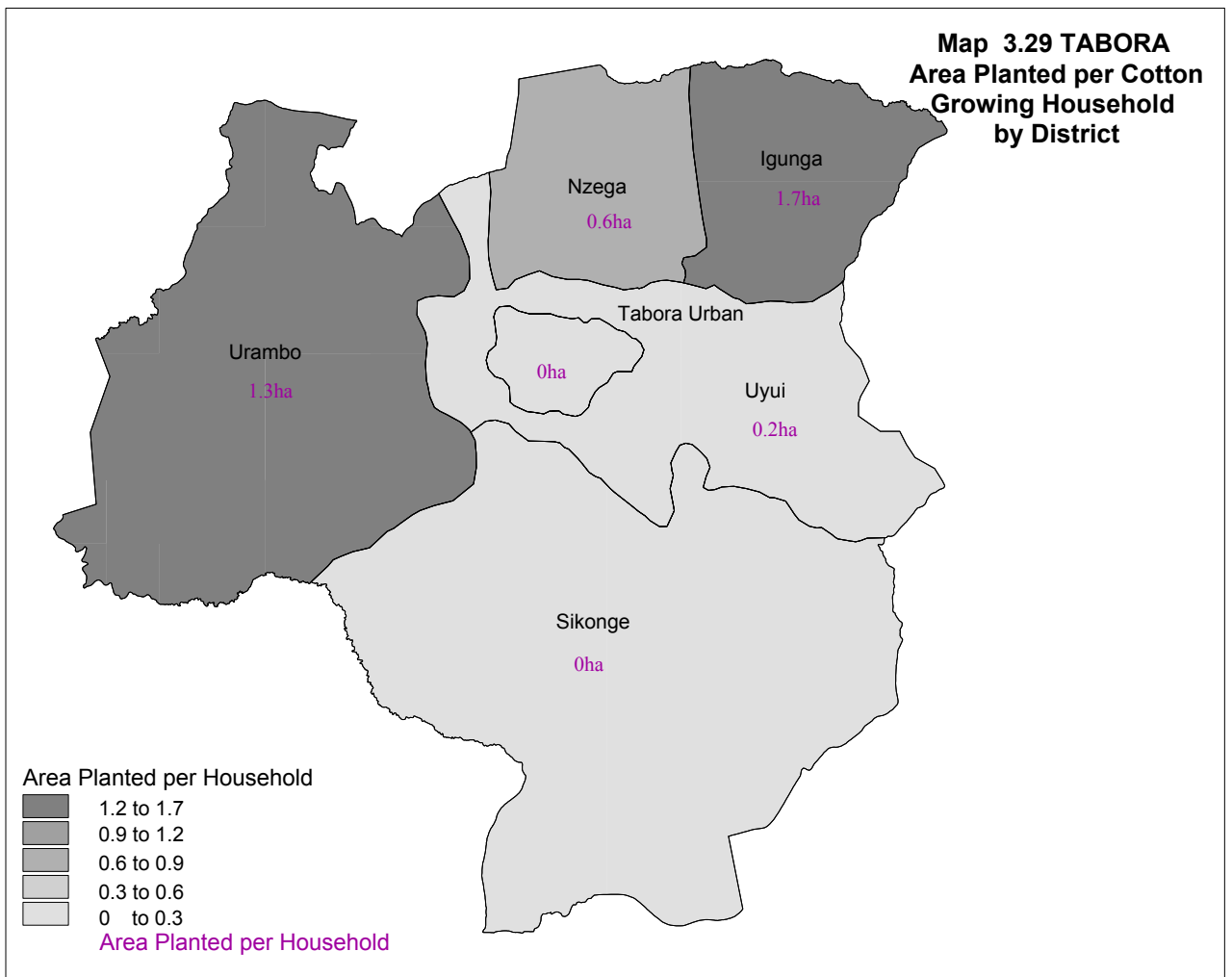
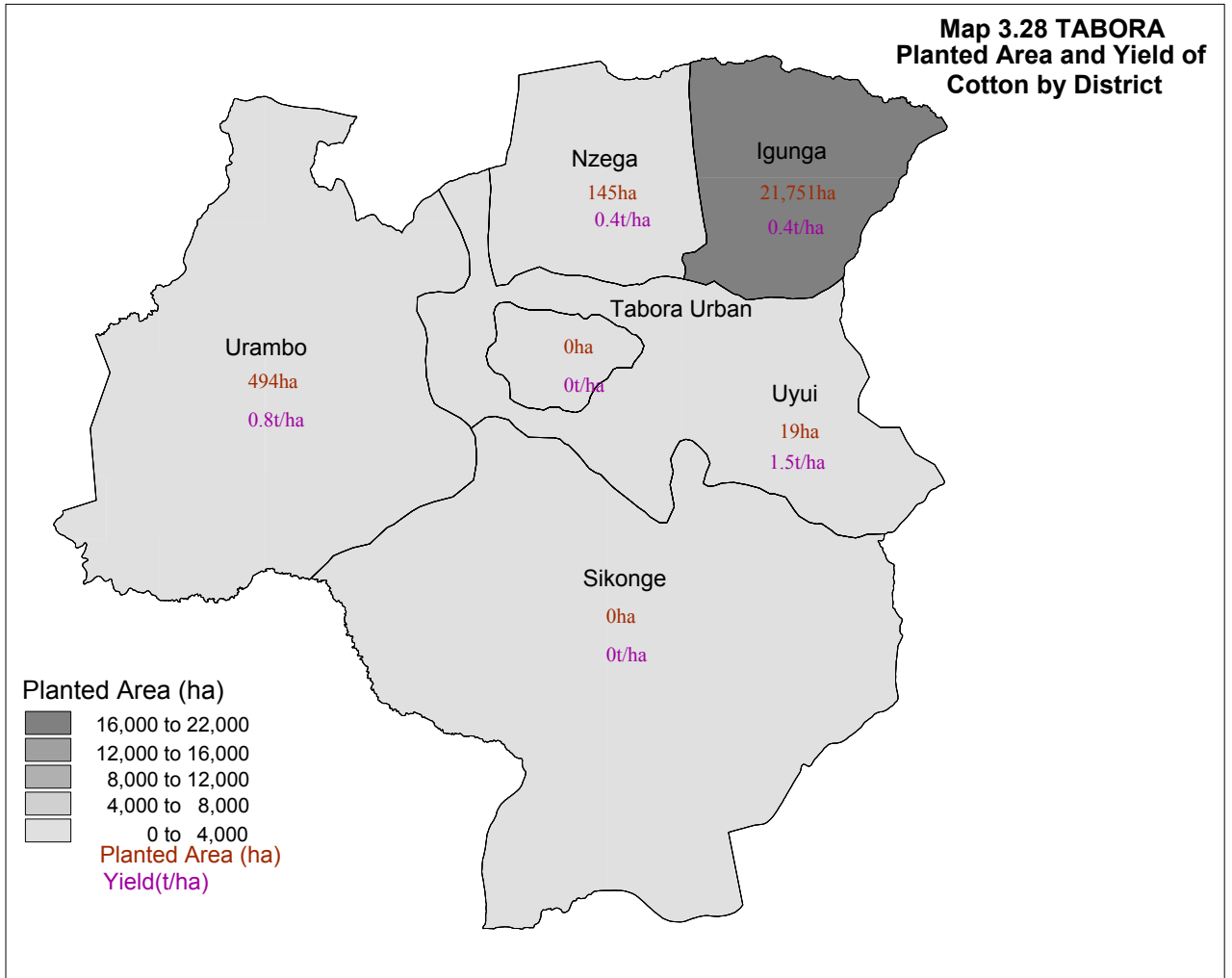
Method of Land Clearing	Number of Households	Area Planted	%
Mostly Hand Slashing	208,502	451,452	88.5
Mostly Bush Clearance	19,557	46,763	9.2
No Land Clearing	3,262	5,635	1.1
Mostly Burning	2,361	4,611	0.9
Mostly Tractor Slashing	670	1,535	0.3
Other	150	122	0.0
Total	234,501	510,117	100.0

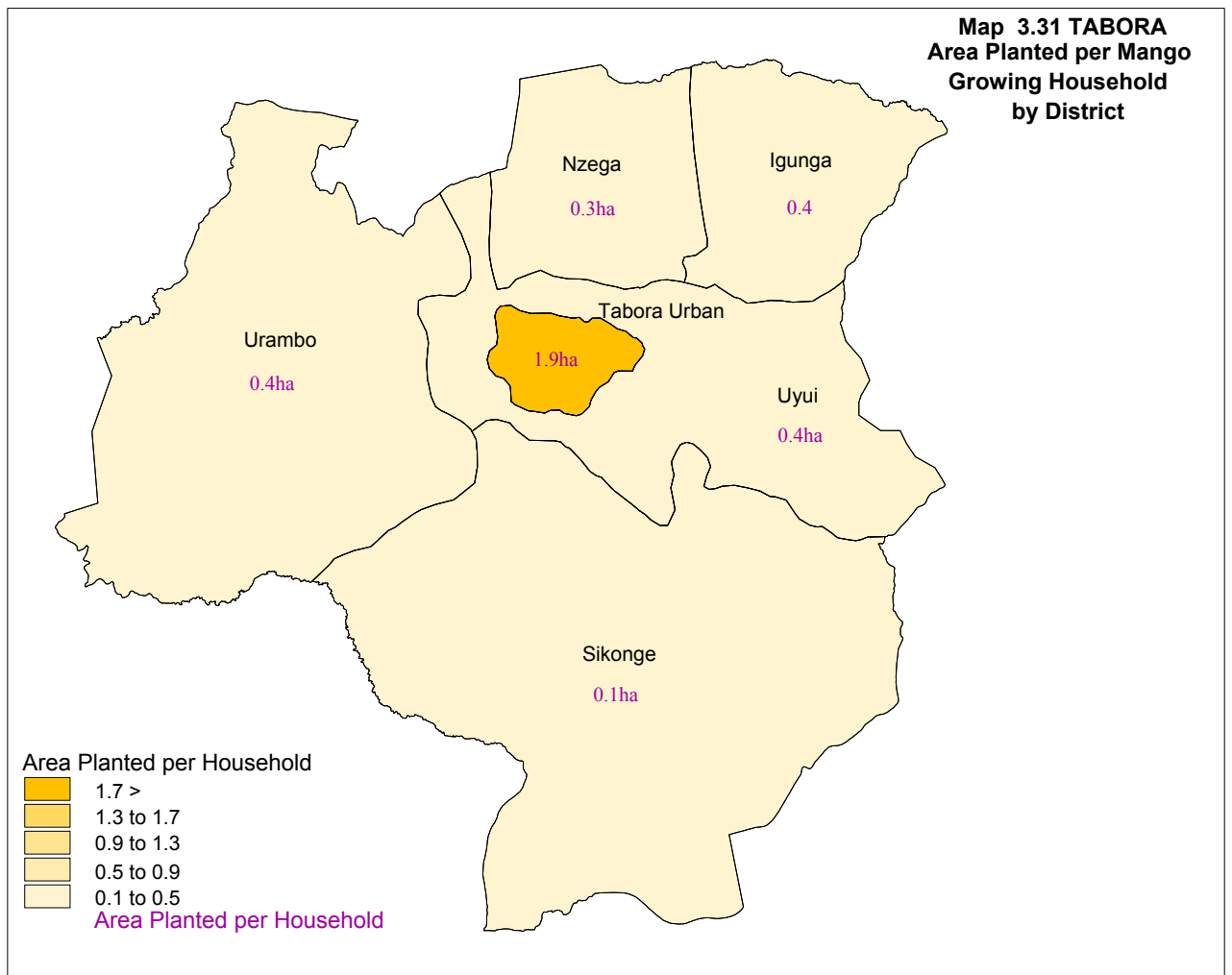
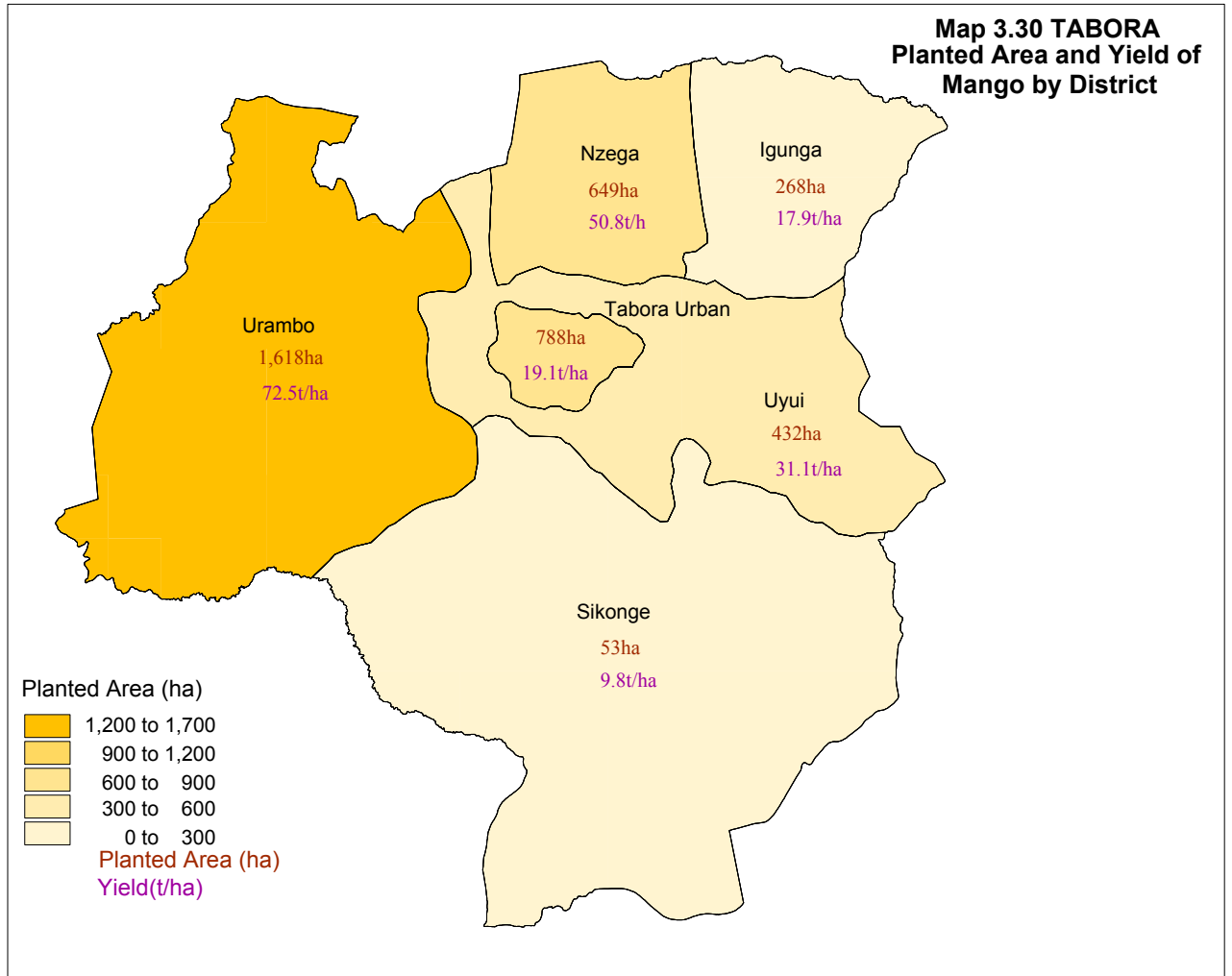
3.5.2 Methods of Soil Preparation

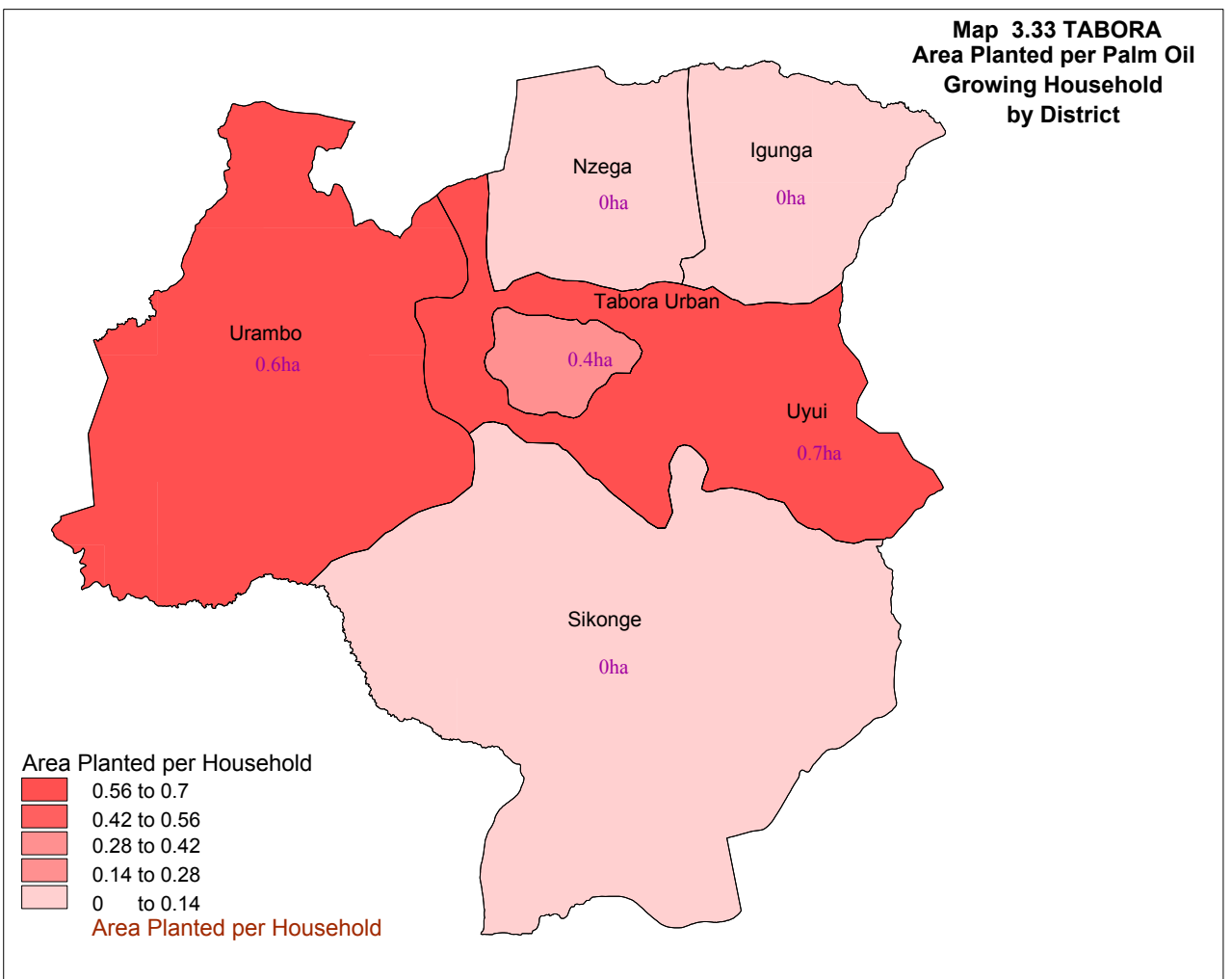
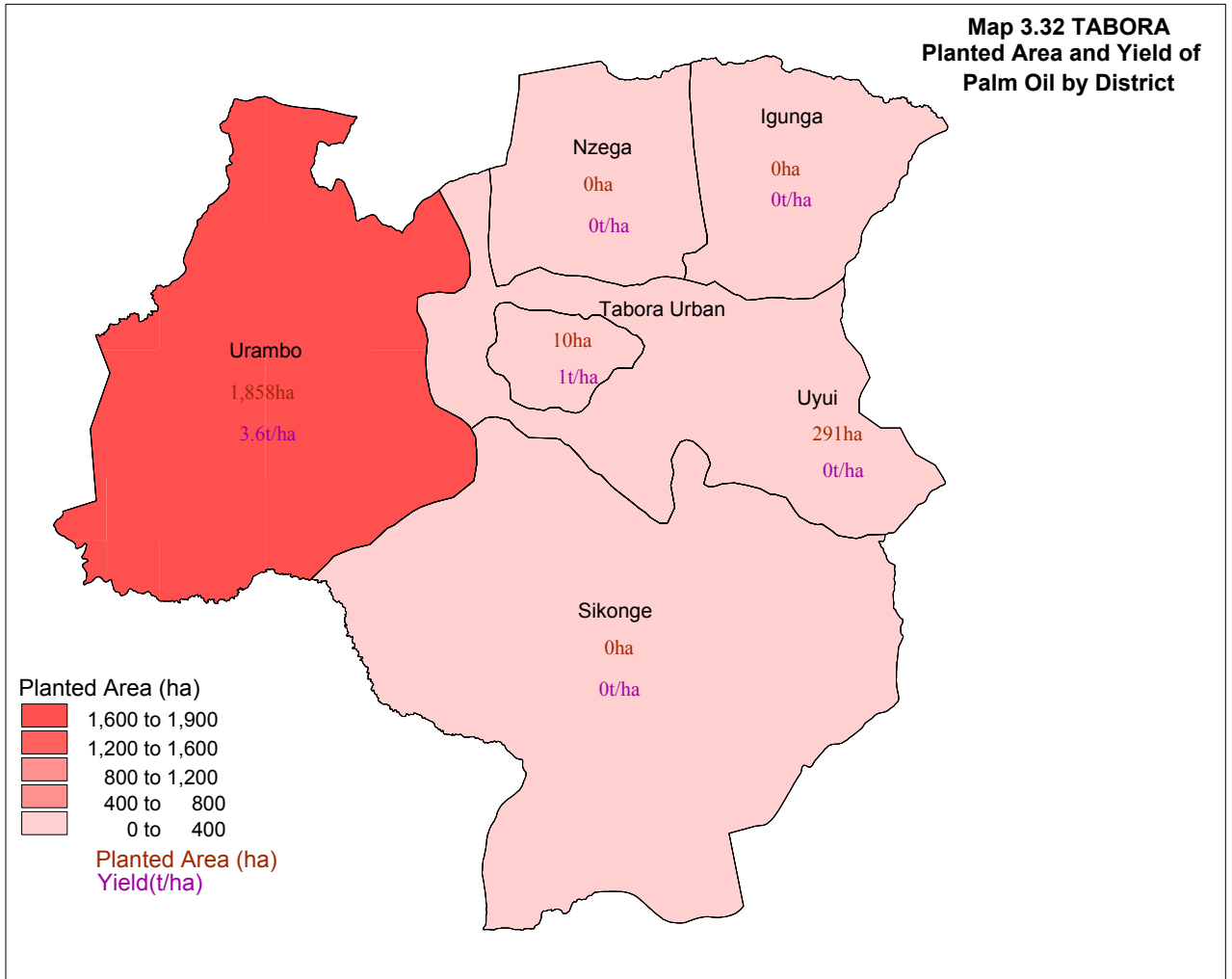
Ox-ploughing is the most method used for soil preparation and was used in an area of 261,638 ha which represented 51 percent of the total planted area, closely followed by hand cultivation (244,900 ha, 48%) and tractor ploughing (5,117 ha, 1%).

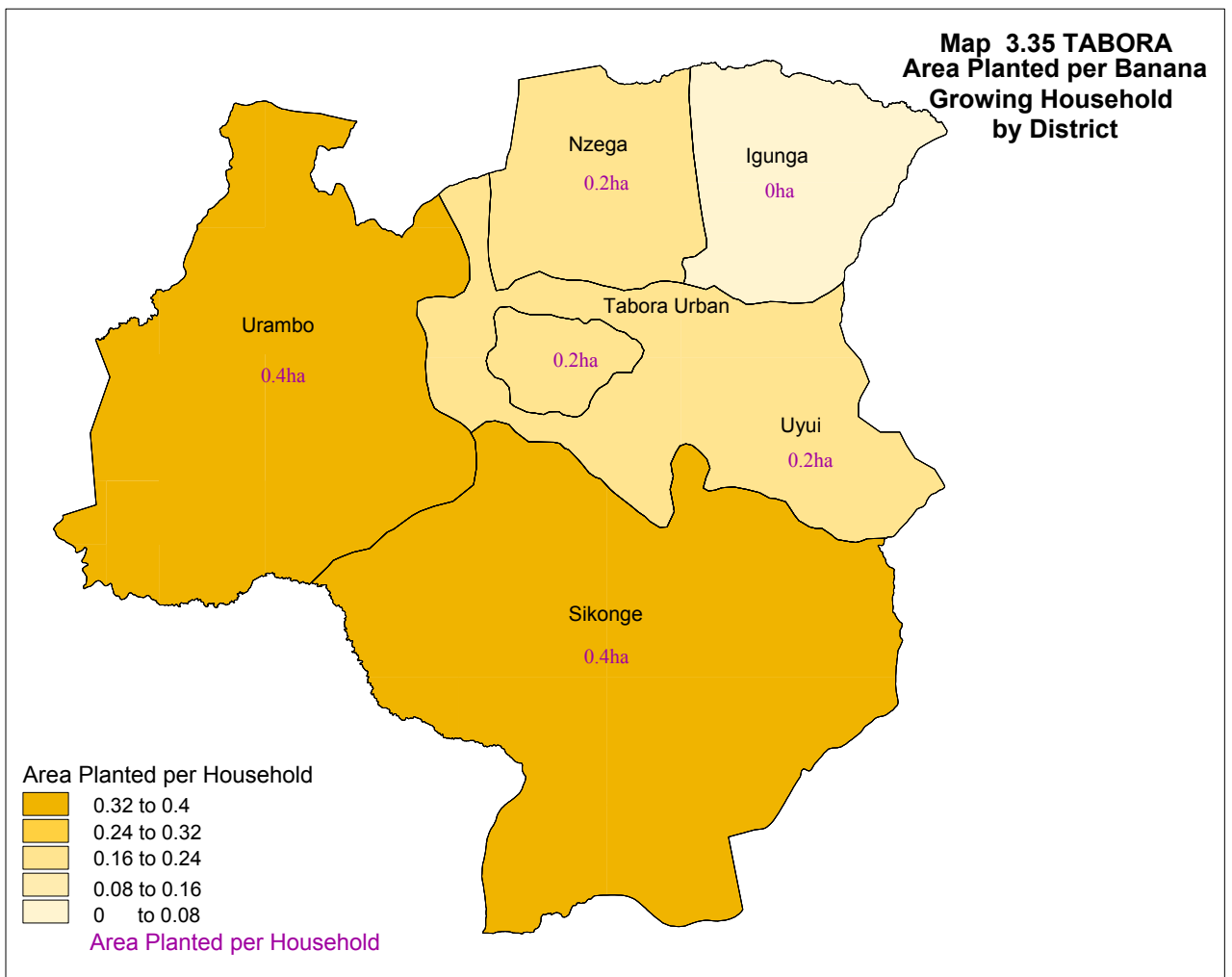
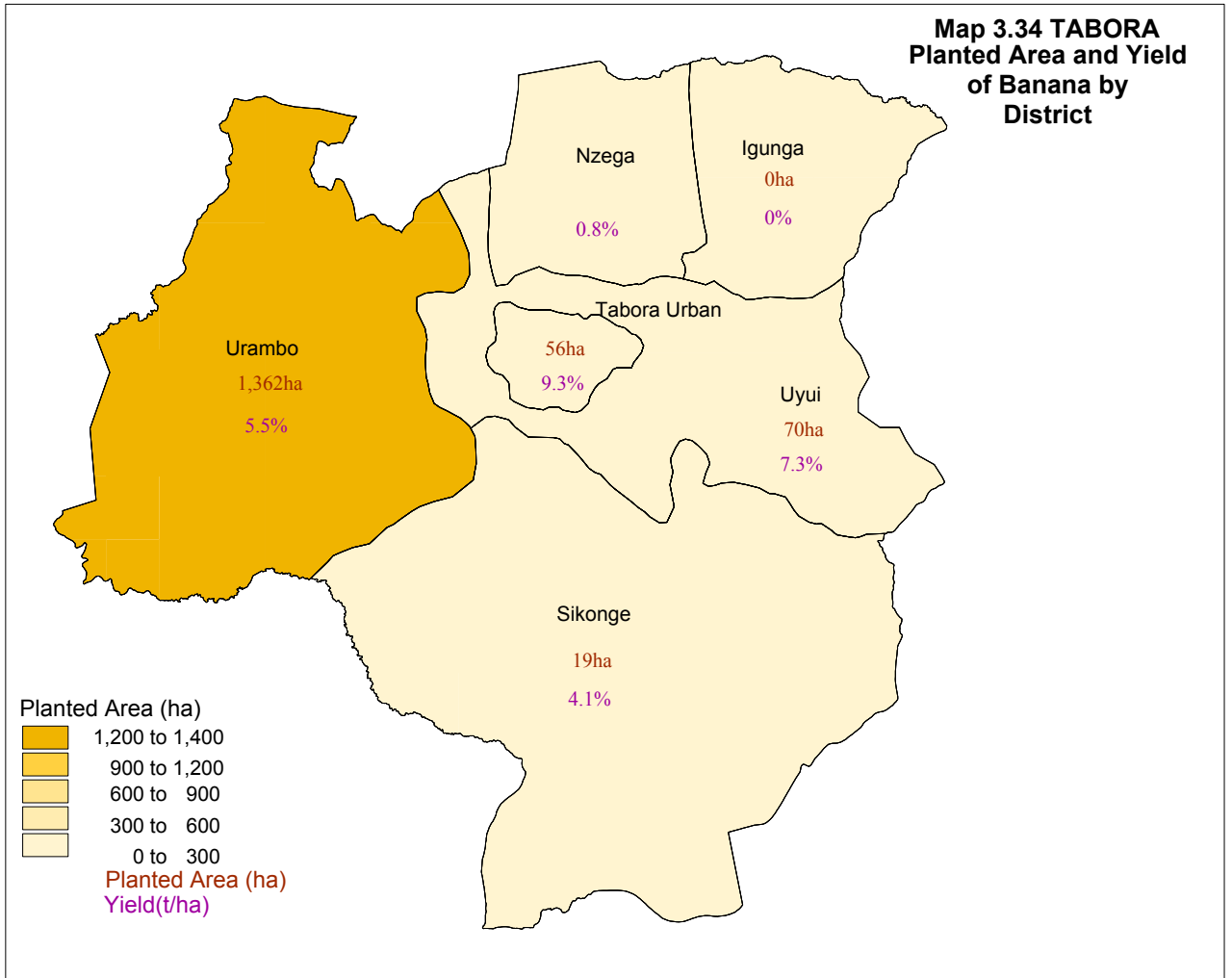
In Tabora region, Igunga district had the largest planted area cultivated with oxen (129,795 hectares, 25.4%) followed by Nzega (64,739 ha, 12.7%), Uyui (31,866 ha, 6.2%), Sikonge (18,060 ha, 3.5%), Urambo (15,290 ha, 2.44%), and Tabora Urban (1,888 ha, 0.4%).

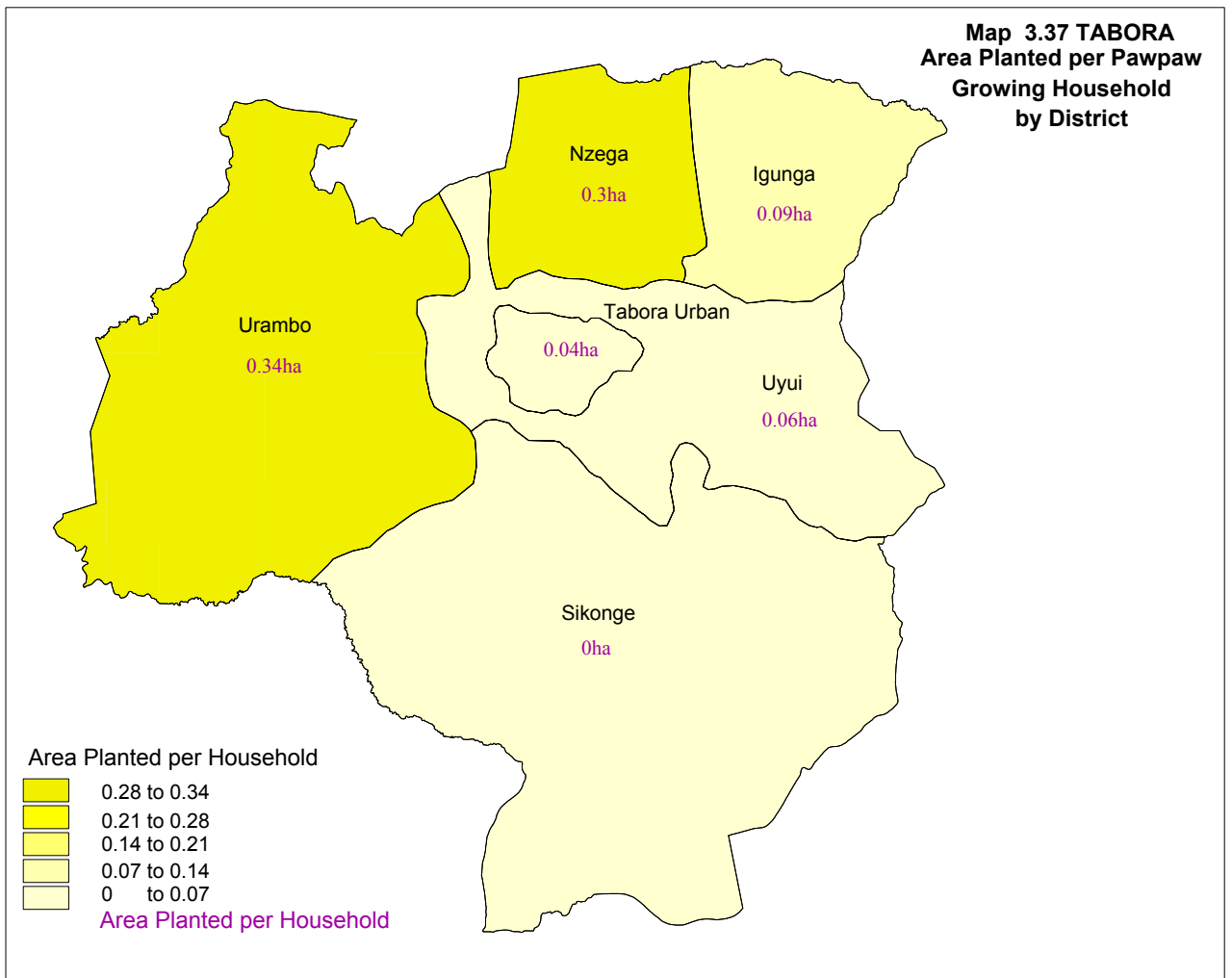
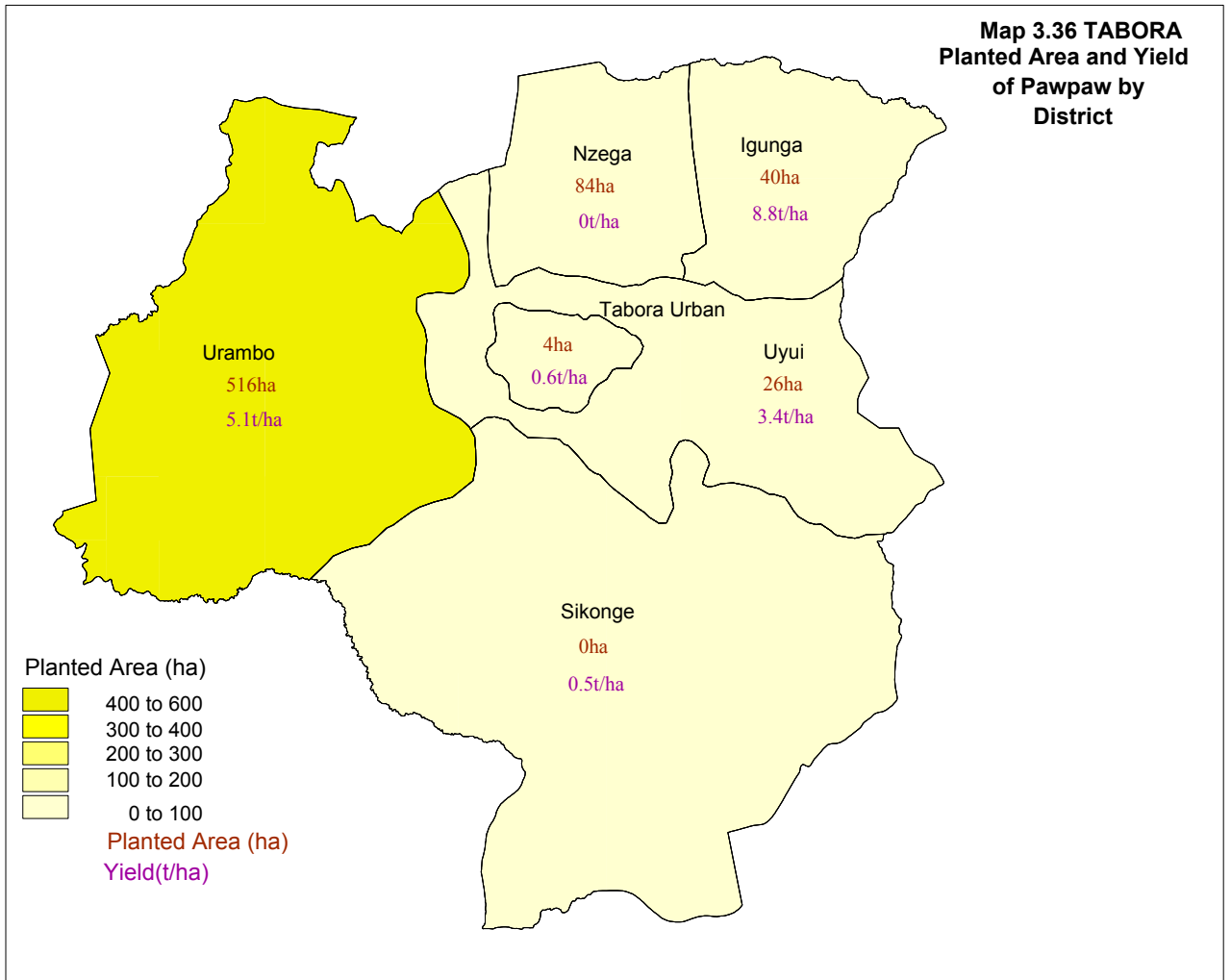












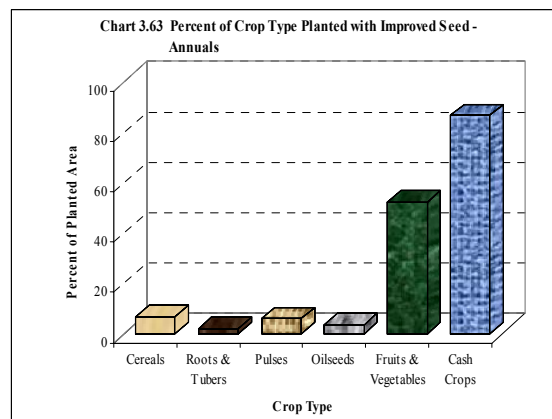
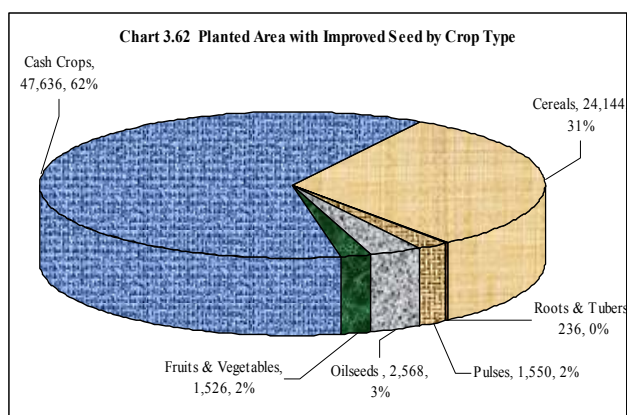
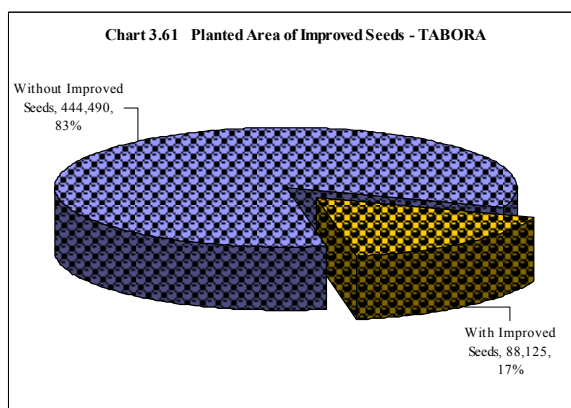
3.5.3 Improved Seed Use

The planted area using improved seeds was estimated at 88,125 ha which represents 17 percent of the total area planted with the annual crops and vegetables area.

Cash crops had the largest area planted with improved seeds (47,636 ha, 62% of the planted area with improved seeds) followed by cereals (24,144 ha, 31%), Oil seeds (2,568 ha, 3%), pulses (1,550 ha, 2%), fruits and vegetables (1,526 ha, 2%) and roots and tubers (236 ha, 0.3%) (Chart 3.62).

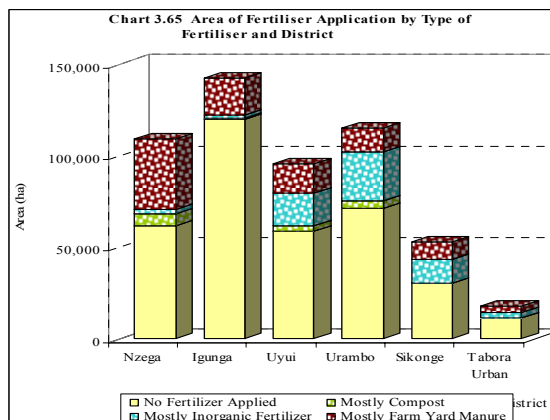
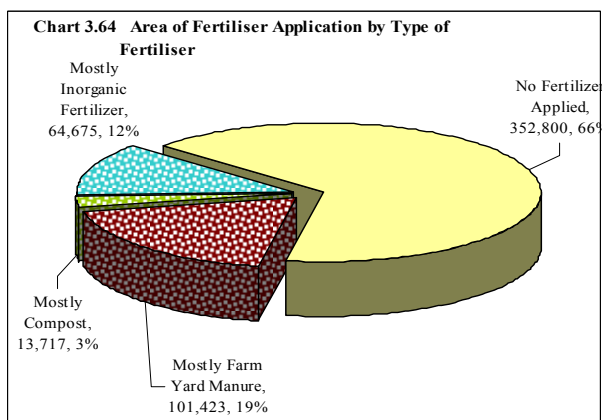
However, the use of improved seed in cash crops and fruits and vegetables is much greater than in other crop types (87% and 53% respectively), only

2.2 percent of the planted area for root and tuber crops used improved seed (Chart 3.63).



3.5.4 Fertilizer Use

The use of fertilisers on annual crops is small with a planted area of only 179,816 ha (34% of the total planted area in the region) having been applied with fertilizers. The planted area without fertiliser for annual crops was 352,800 hectares representing 66 percent of the total area planted with annual crops. Of the planted area with fertiliser application, farm yard manure was applied to 101,423 ha which represented 56 percent of the planted area applied with fertilisers in the region. This was followed by inorganic fertilizers (64,676 ha, 36%). Compost manure was used on a very small area which represented only 8 percent of the area planted with fertilizers.



The highest percentage of the area planted with fertilizer (all types) was in Nzega (26.4%) followed by Urambo (24.2%), Igunga (12.6%), Sikonge (12.6%) and Tabora Rural (3.6%) (Table 3.8 and Charts 3.64 and 3.65).

Most annual crop growing households do not use any fertiliser (approximately 170,306 households, 72.3%) (Map 3.38).

Table3.8 Planted Area by Type of Fertilizer Use and District

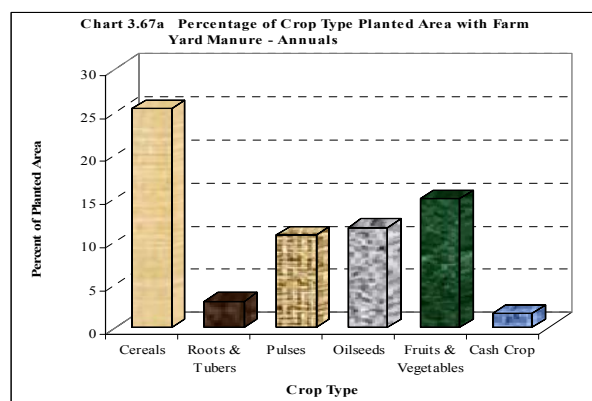
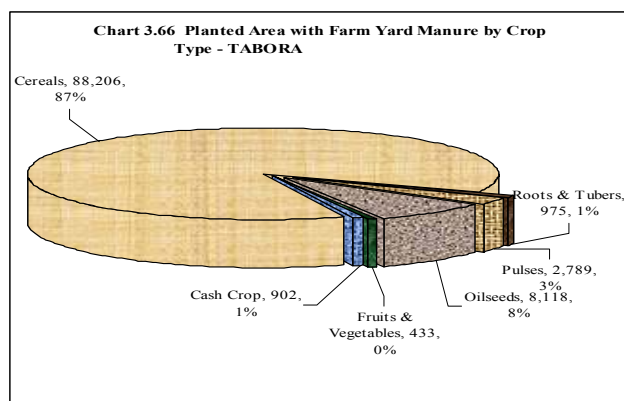
District	Fertilizer Use				No Fertilizer Applied
	Mostly Farm Yard Manure	Mostly Compost	Mostly Inorganic Fertilizer	Total	
Nzega	38,652	6,086	2,767	47,505	61,817
Igunga	20,436	625	1,562	22,623	119,830
Uyui	16,464	2,750	17,736	36,950	58,704
Urambo	12,782	3,716	27,027	43,525	71,339
Sikonge	9,520	331	12,859	22,710	30,005
Tabora Urban	3,570	209	2,724	6,503	11,104
Total	101,423	13,717	64,675	179,816	352,800

Table 3:9 Number of Crop Growing Households and Planted Area by Type of Fertilizer Use and District

District	Fertilizer Use									
	Mostly Farm Yard Manure		Mostly Compost		Mostly Inorganic Fertilizer		No Fertilizer Applied		Total	
	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area
Nzega	12,860	38,652	3,087	6,086	1,413	2,767	48,206	61,817	65,566	109,322
Igunga	3,998	20,436	460	625	862	1,562	39,705	119,830	45,025	142,453
Uyui	3,850	16,464	1,124	2,750	8,428	17,736	27,811	58,704	41,212	95,654
Urambo	3,102	12,782	1,364	3,716	13,908	27,027	35,746	71,339	54,120	114,863
Sikonge	1,943	9,520	47	331	5,258	12,859	12,217	30,005	19,464	52,716
Tabora Urban	1,228	3,570	160	209	2,197	2,724	6,622	11,104	10,206	17,606
Total	26,982	101,423	6,240	13,717	32,066	64,676	170,306	352,800	235,594	532,615

3.5.4.1 Farm Yard Manure Use

The total planted area applied with farm yard manure in Tabora region was 101,423 ha. The number of households that applied farm yard manure in their annual crops was 26,982 (Table 3.9). Cereals had the highest percent of the total area planted with applied farm yard manure (87.0%), followed by oil seeds (8.0%), pulses (2.7%), root and tuber (1.0%), cash crops (1.0%) and fruits and vegetables (0.4%).



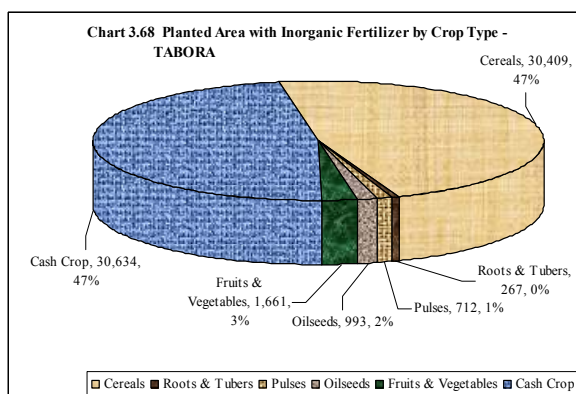
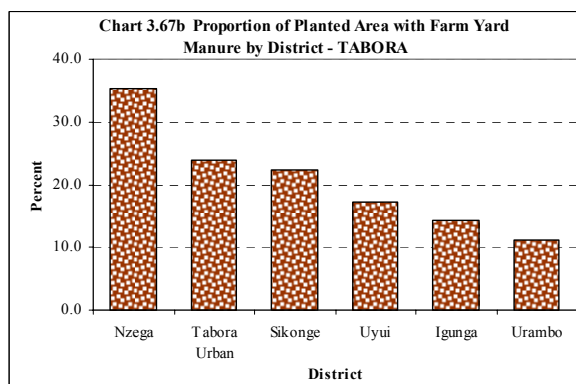
Also, cereals had the highest proportion of the planted area with farm yard manure (25% of the total area of cereals in Tabora). This was followed by fruits and vegetables (15%), oil seeds (12%), pulses (11%), roots and tubers (3%) and cash crops (2%) (Chart 3.67a).

Farm yard manure was mostly used in Nzega (35.4% of the total planted area in the district), followed by Tabora Urban (24.0%), Sikonge (22.4%), Uyui (17.2%), Igunga (14.3%) and Urambo (11.1%) (Chart 3.67b).

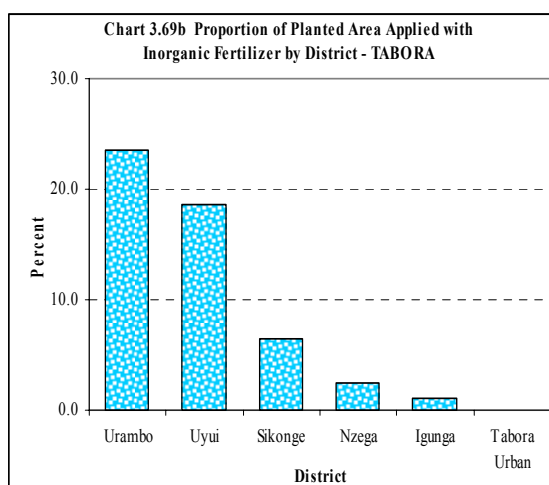
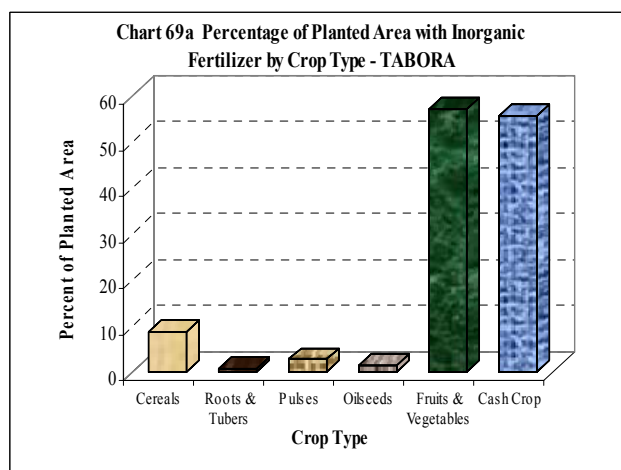
For permanent crops, most farm yard manure was used in the production of palm oil (32.0%), followed by mango (25.0%), banana (23.0%), pawpaw (12.0%) oranges (2.0%), sugar cane (1.3%), coconut (1.1%), mandarine/tangerine, lemon/lime (1.3%), guava (0.3%) and jack fruits (0.2%)

3.5.4.2 Inorganic Fertiliser Use

The total planted area applied with inorganic fertilisers in Tabora region was 64,676 ha which represents 12.1 percent of the total area planted with annuals in the region and 36 percent of the total planted area with fertilizers. The number of households that applied inorganic fertilizer on their annual crops was 32,066 representing 13.6 percent of the total household planted annual crops (Table 3.10).



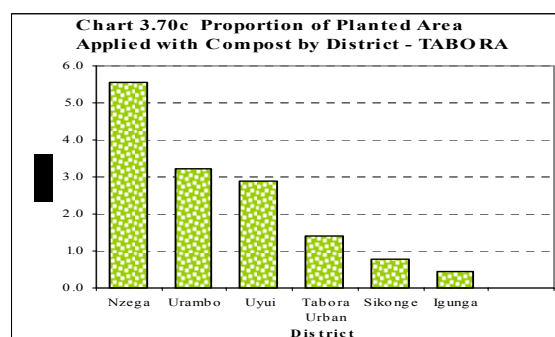
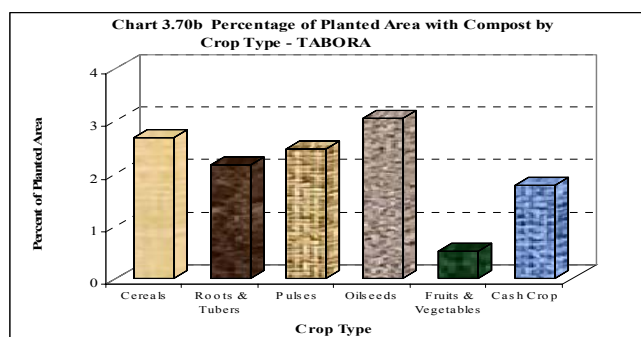
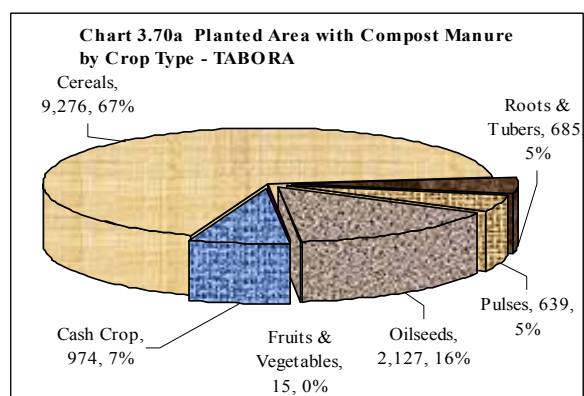
The largest area applied with inorganic fertilizers was on cash crops (47.4% of the total area applied with inorganic fertilizers) followed by cereals (47.0), fruits and vegetables (2.6%), oil seeds (1.5%), pulses (1.1%) and root and tubers (0.4%) (Chart 3.68). However, the proportion of planted area applied with inorganic fertilizer for fruit and vegetables was 57 percent. This was followed by cash crops (56%), cereals (9%), pulses (23%), oil seeds (1%) and roots and tubers (1%) (Chart 3.69a). Inorganic fertiliser was mostly used in Urambo (23.5% of the total planted area in the district), followed by Uyui (18.5%), Sikonge (6.4%), Nzega (2.5%) and Igunga (1.1%). Tabora Urban reported to have used no inorganic fertilisers (Chart 3.67b). In permanent crops inorganic fertilizers were used in orange (76.2%), followed by sugar cane (22.0%) and mango (1.8%).



3.5.4.3 Compost Use

The total planted area applied with compost was 13,717 ha which represents only 2.6 percent of the total area planted with annual crops in the region and 7.6 percent of the total planted area applied with fertiliser in the region. The number of households that applied compost manure on their annual crops was 6,240 representing 2.6 percent of the total households that planted annual crops (Table 3.9 and Chart 3.70a). The proportion of area applied with compost was very low for each type of crop (1 to 3%) (Chart 3.70b); however the distribution of the total area using compost manure shows that 67 percent of this area was cultivated with cereals, followed by oil seeds (16%), cash crops (7%) roots and tubers (5%), pulses (5%) and fruits and vegetables (0.1%) (Chart 3.70a).

Compost was mostly used in Nzega (5.6% of the total planted area in the district) followed by Tabora Urban (3.2%). Other districts used very little compost (Chart 3.70c).

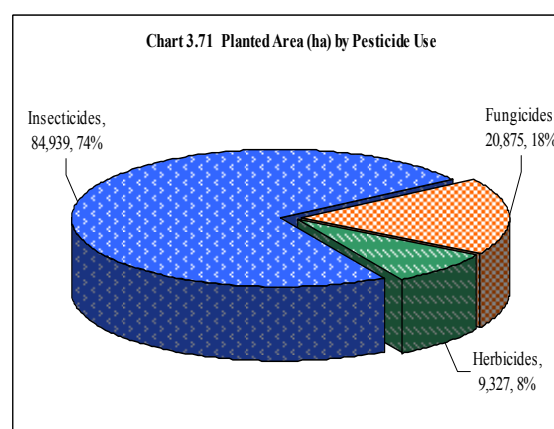


In permanent crops, compost was mostly used in the production of orange (23.1%) followed by mango (22.3%), banana (20.5%), avocado (5.3%) palm oil (11.1%) lime/lemon (7.4%), pawpaw (7.3%), guava (7.3%) and sugar cane (1.0%).

3.5.5 Pesticide Use

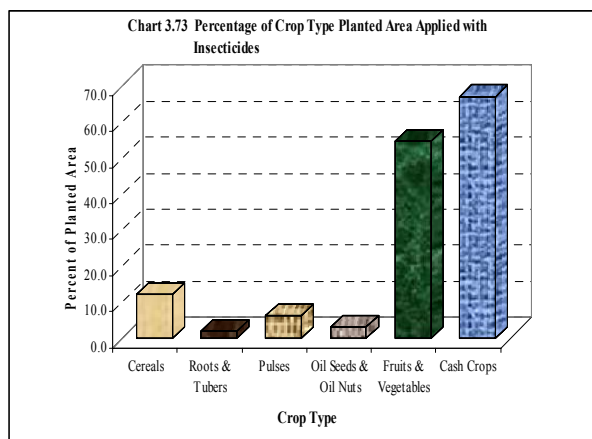
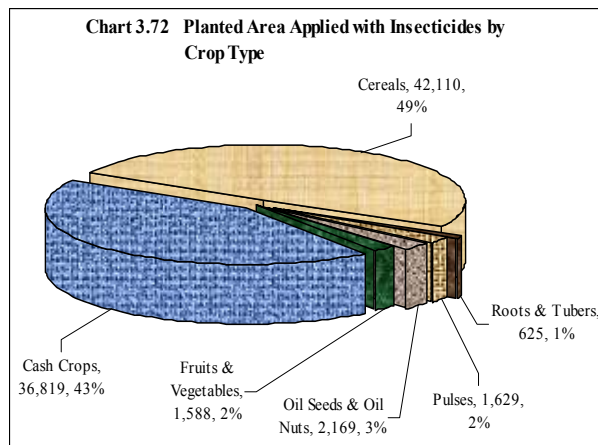
Pesticides are chemicals used for controlling insects, diseases and weeds. This section analyses the use of these chemicals by smallholders on both annual and permanent crops in the region. Pesticides were applied to a planted area of 115,141 ha of annual crops and vegetables.

Insecticides are the most common pesticides used in the region (74% of the total area applied with pesticides). This was followed by fungicides (18%) and herbicides (8%) (Chart 3.71).



3.5.5.1 Insecticide Use

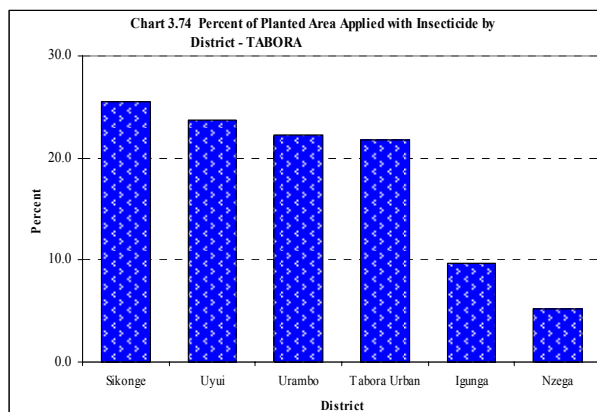
The planted area applied with insecticides was estimated at 84,939 ha which represented 16 percent of the total area planted with annual crops and vegetables.



Cereals had the largest planted area applied with insecticides (42,110 ha, 49.6% of the total planted area with insecticides) followed by cash crops (36,819 ha, 43.3%), oil seeds (2,169 ha, 2.6%), pulses (1,629 ha, 1.9%), fruits and vegetables (1,588 ha, 1.9%) and roots and tubers (626 ha, 0.7%) (Chart 3.72). However, the percent of insecticides used in cash crops and fruits and vegetables is much greater than in other crop types (67.0% and 54.7% respectively), while only 2 percent of roots and tubers were applied with insecticides (Chart 3.73).

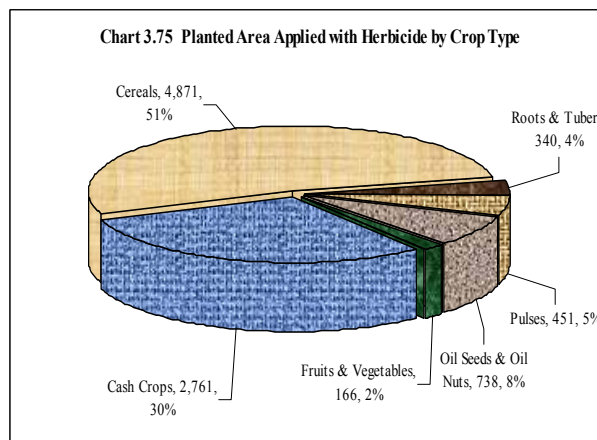
Annual Crops with more than 50 percent insecticide use were cabbage (100%), ginger (100%), radish (92.2%), tobacco (85.3%) and onions (61.3%).

Sikonge had the highest percent of planted area applied with insecticides (25.5% of the total planted area with annual crops in the district). This was closely followed by Uyui (23.6%) then Urambo (22.3%), Tabora Urban (21.3%), Igunga (9.7%) and Nzega (5.2%) (Chart 3.74).



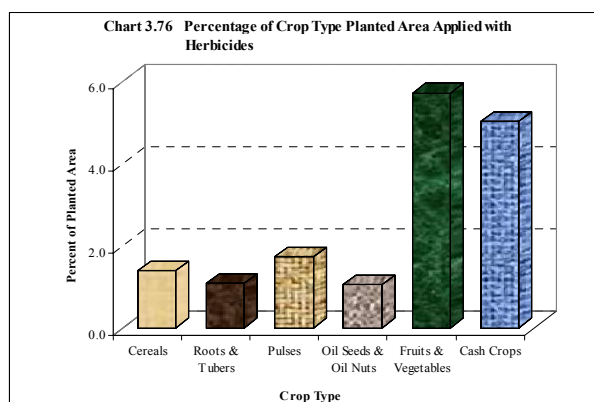
3.5.5.2 Herbicide Use

The planted area applied with herbicides was 9,327 ha which represented 1.8 percent of the total area planted with annual crops and vegetables. Cereals had the largest planted area applied with herbicides (4,871 ha, 51%) followed by cash crops (2,761 ha, 30%), oil crops (738 ha, 8%), pulses (451 ha, 5%) and roots and tubers (340 ha, 4%) and fruits and vegetables (166 ha, 2%) (Chart 3.75).



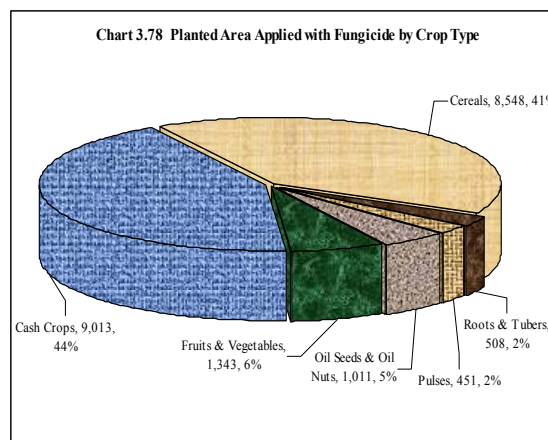
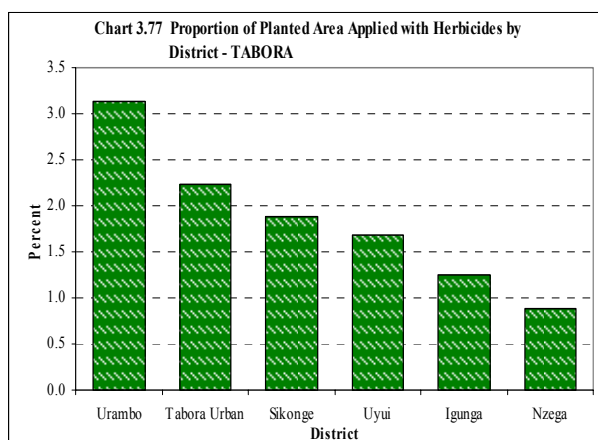
However, the percent of herbicide use on fruits/ vegetables and cash crops was much greater than in other crop types (5.7% and 5.0% respectively) while only 1.1 percent of roots and tubers and 1.1 percent of oil seeds was applied with herbicides (Chart 3.76). The top six annual crops with highest percentage use of herbicides in terms of planted area were tomatoes (11.3%), tobacco (6.7%), yams (6.1%), onions (4.8%), cotton (2.6%) and beans (2.1%).

Urambo had the highest percent of planted area applied with herbicides (3.1% of the total planted area with annual crops in the district). This was followed by Tabora Urban (2.2%) then Sikonge (1.9%), Uyui (1.7%) and Igunga (1.2%). The smallest percentage use was recorded in Nzega district (0.9%) (Chart 3.77).



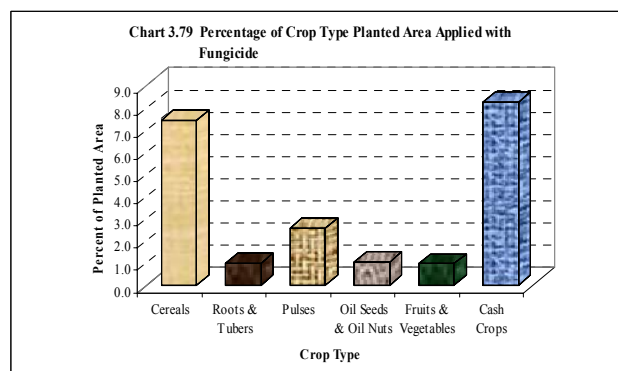
3.5.5.3 Fungicide Use

The planted area applied with fungicides was 20,875 ha which represented 3.9 percent of the total area planted with annual crops and vegetables. Cash crops had the largest planted area applied with fungicides (9,013ha, 44%) followed by cereals (8,548 ha, 41%), fruits and vegetables (1,343 ha, 6%), oil seeds (1,011 ha, 5%) roots and tubers (508 ha, 2%) and pulses (451 ha, 2%) (Chart 3.78).



However, the percentage use of fungicide in cash crops and cereals was much greater than in other crop types (8.2% and 7.4% respectively), while only 0.9 percent of fruits and vegetables was applied with fungicides (Chart 3.79).

Annual crops with more than 40 percent fungicide use were ginger (100%), cucumber (100%), radish (92.2%) and onion (56.8%).



Urambo had the highest percent of planted area with fungicides (7.4% of the total planted area with annual crops in the district). This was followed by Sikonge (5.5%), Tabora Urban (4.2%), Uyui (3.4%), Igunga (2.9%) and Nzega (1.2%) (Chart 3.80).

3.5.6 Harvesting Methods

The main harvesting method for cereals was reported to be by hand. Very small amounts of maize were harvested by draft animals (0.3%) and by powered tools (0.1%) while paddy was harvested by draft animals (0.1%) and powered animal (0.1) percent. All other cereals and annual crops were harvested by hand except small amount of oil seeds and cash crops which were harvested by machines (oil seeds - groundnuts were harvested by draft animals (0.3%) and powered tools (0.3%), cash crops – tobacco was harvested by draft animals (0.7%), powered tools (0.9%) and driven machine (0.9%).

3.5.7 Threshing Methods

Hand threshing was the most common method used, with 99.1 percent of the total area planted with cereals being threshed by hand. Human powered tools and engine driven machines were used on cereal crops harvested from 0.1 percent and 0.8 percent of the total planted area respectively.

3.6 Irrigation

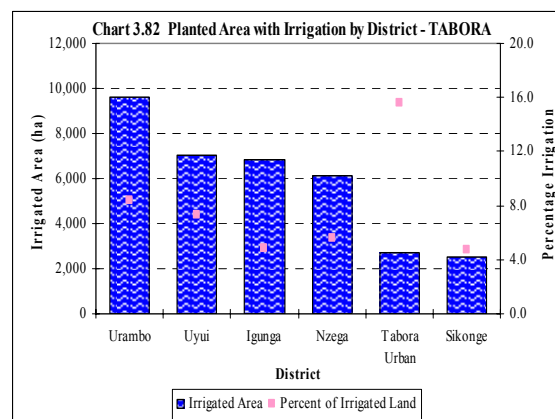
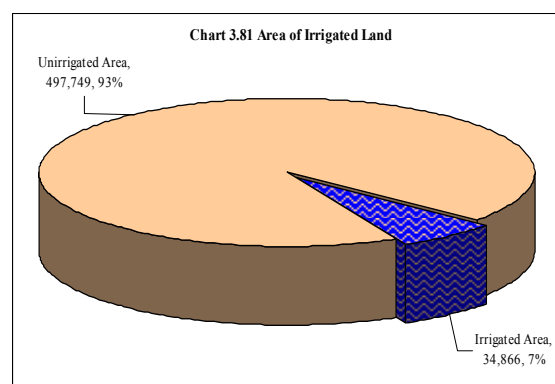
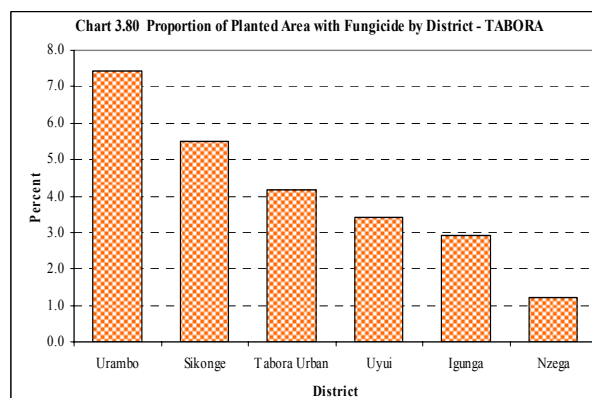
Water is the limiting factor to crop production in the majority of areas in Tanzania and without water most other agricultural practices applied to crops do not result in significant increases in yields. This section deals with the area under irrigation for different crops and the means by which water was extracted from the source and applied to the field.

3.6.1 Area Planted with Annual Crops and Under Irrigation

In Tabora region, the area of annual crops under irrigation was 34,866 ha representing 7 percent of the total area planted (Chart 3.81). The area under irrigation during the dry season was not reported.

The district with the largest planted area under irrigation for annual crops was Urambo (9,624 ha, 27.6% of the total irrigated planted area with annual crops in the region). This is followed by Uyui (7,037 ha, 20.2%), Igunga (6,822 ha, 19.6%), Nzega (6,125 ha, 17.6%), Tabora Urban (2,738 ha, 7.9%) and Sikonge (2,520 ha, 7.2%).

When expressed as a percentage of the total area planted in each district, Tabora Urban had the higher percentage with 15.6 percent under irrigation. This was followed by Urambo (8.4%), Uyui (7.4%), Nzega (5.6%), Igunga (4.8%) and Sikonge (4.8%) (Chart 3.82) and Map 3.39).



Of all the different crops and in terms of proportion of the irrigated planted area, ginger, chillies and cucumber were the most irrigated crops with 100 percent irrigation followed by tomatoes (79.6%), onions (73.8%), amaranths (57.9%) and cabbages (44.2%).

In terms of crop type, the area under irrigation for roots and tubers was 19,713 ha (56.5% of the total area under irrigation), followed by cereals with 10,780 ha (30.9%), fruit and vegetables (1,836 ha, 5.3%), cash crops (1,701 ha, 4.9%), oil seeds (741 ha, 2.1%) and pulses (94 ha, 0.3%). All of the irrigation on cereals was applied to maize, paddy and sorghum.

The number of households practicing irrigation in Tabora region appears to have increased over the eight year intercensal period from 9,000 to 17,181 households. This may not be statically significant due to the small number of households sampled.

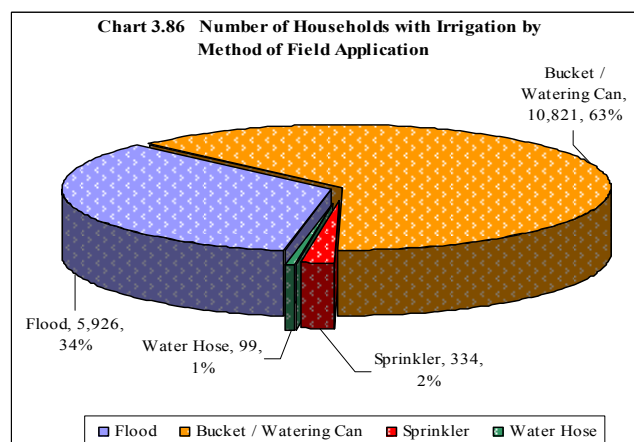
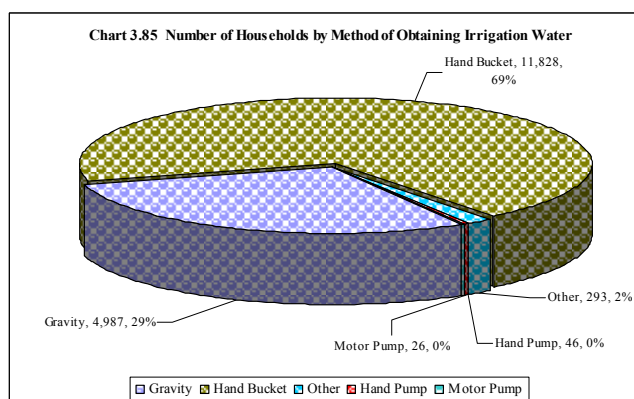
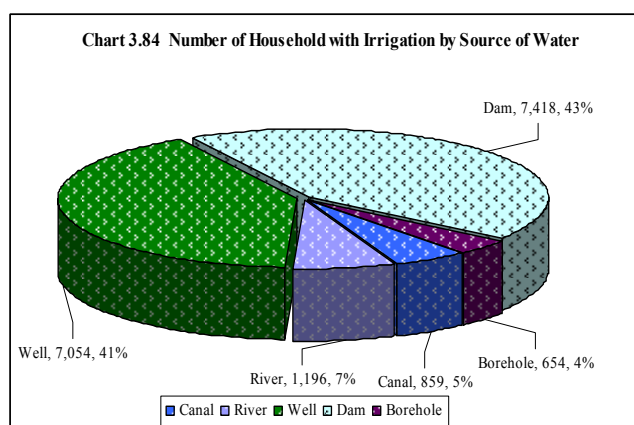
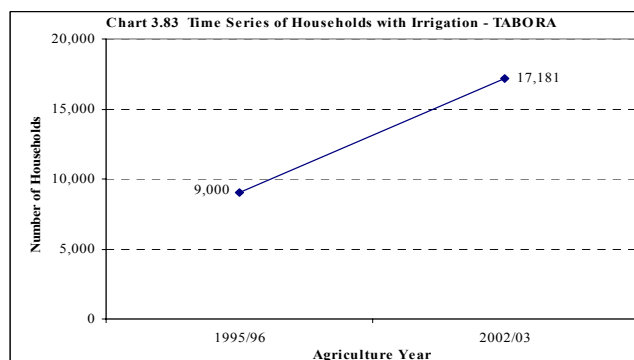
3.6.2 Sources of Water Used for Irrigation

The main source of water used for irrigation was from dams (43% of households with irrigation). This was followed by wells (41%) and rivers (7%). Proportions of households that used boreholes and canals as a source of water for irrigation were very small being 4% and 5% respectively (Chart 3.84). Most households using irrigation in Uyui, Nzega and Igunga get their irrigation water from dams (79%, 61% and 60% respectively).

3.6.3 Methods of Obtaining Water for Irrigation

Hand bucket was the most common method of getting water for irrigation with 69 percent of households using this method. This was followed by gravity with 29 percent of households. The remaining methods (hand pump, motor pump and others) were of minor importance (Chart 3.85).

Most households that used the hand bucket for irrigation were Urambo (38.7%), followed by Uyui (23.6%), Nzega (11.1%), Sikonge (9.9%), Tabora



(9.0%) and Igunga (7.7%). Gravity was more common in Igunga with 49 percent of households using the method to get water for irrigation, followed by Nzega (32.5), Uyui (8.2%), Sikonge (6.2%), Urambo (2.5%) and Tabora Urban (1.6%). Although the method of obtaining irrigation water by hand bucket was the most common method in all seven districts, Tabora Urban used some hand and motor pumps for obtaining water.

3.6.4 Methods of Water Application

Most households used bucket/watering can (63% of households using irrigation) as a method of field application. This was followed by flood irrigation (34%). Sprinklers and water hose were not widely used (2% and 1% respectively).

3.7 Crop Storage, Processing and Marketing

3.7.1 Crop Storage

Crop storage means keeping a crop for a certain period of time as food for the household, in order to sell at higher prices or as seed for planting in the following season.

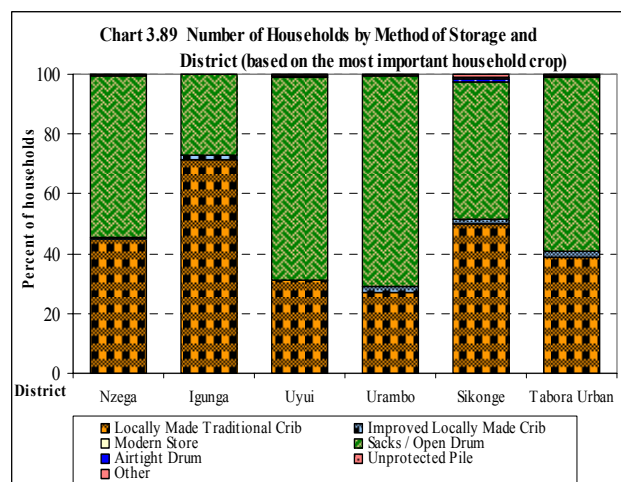
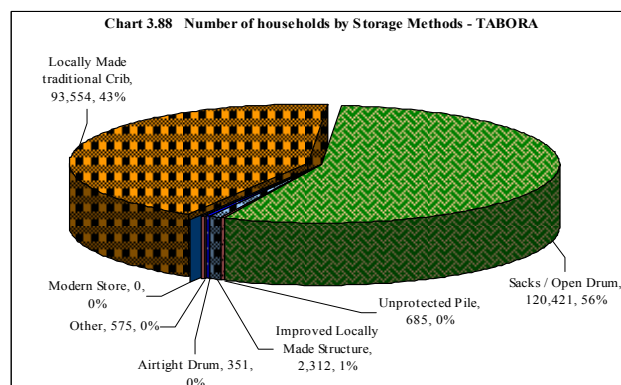
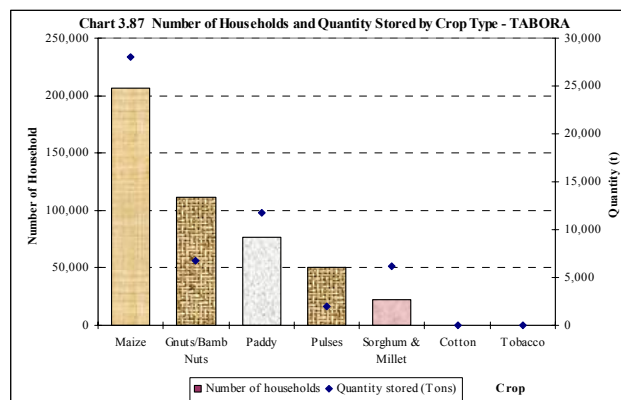
The results for Tabora region show that there were 217,899 crop growing households (92.5% of the total crop growing households) that stored various agricultural products in the region.

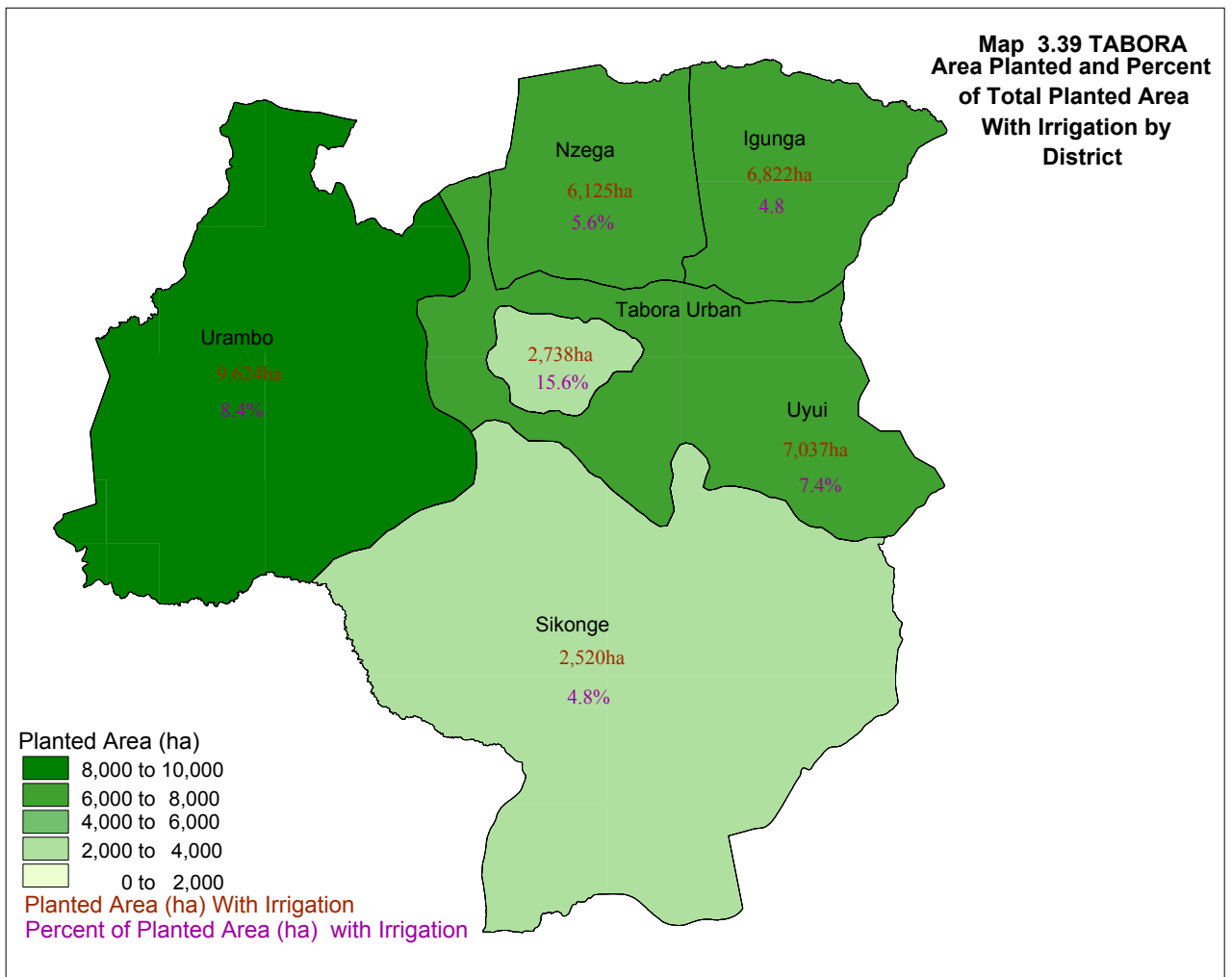
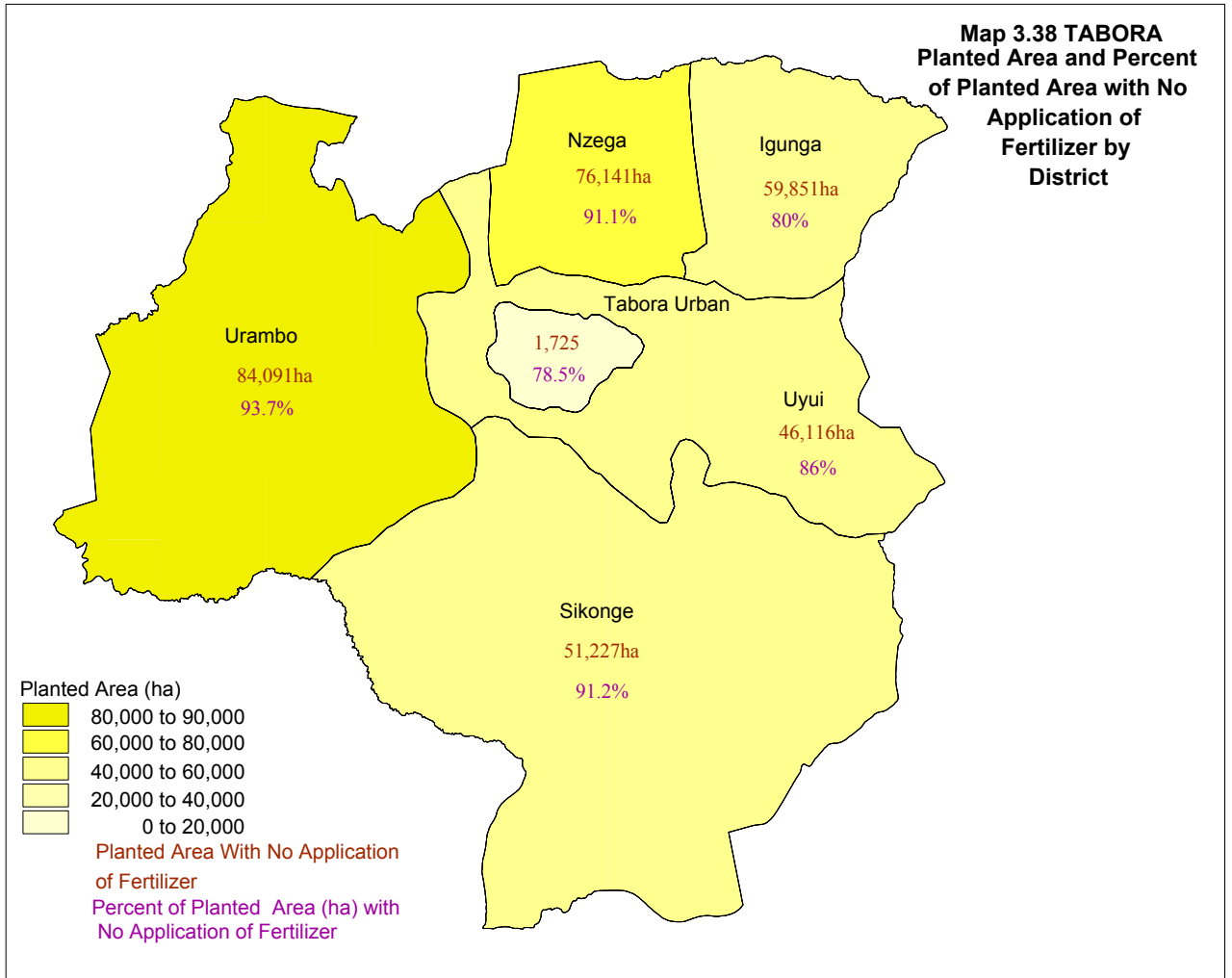
The most important stored crop was maize with 206,605 households storing 28,060 tonnes as of 1st January 2004. This was followed by groundnuts/bambaranuts (111,290 households, 6,695t), paddy (76,850 households, 11,758t), Pulses (50,527 households, 1,995t) and sorghum/millet (21,828 households, 6,195t). Other crops were stored in very small quantities.

3.7.1.1 Methods of Storage

The region had 120,421 crop growing households storing their produce in sacks and/or open drums (55% of households that stored crops in the region). The number of households that stored their produce in locally made traditional cribs was 93,554 (43%). This was followed by improved locally made structure (2,312 households, 1%), unprotected piles (685 households, 0.3%), other methods (575 households, 0.3%) and airtight drums (351 households, 0.2 (Chart 3.88).

Sacks and/or open drums were the dominant storage method in all districts, with the highest percent of households in Urambo using this method (70% of the total number of households storing crop products in the district). This was followed by Uyui (68%), Tabora Urban (59%), Nzega (54%), Sikonge (46%) and Igunga (27%) (Chart 3.89).



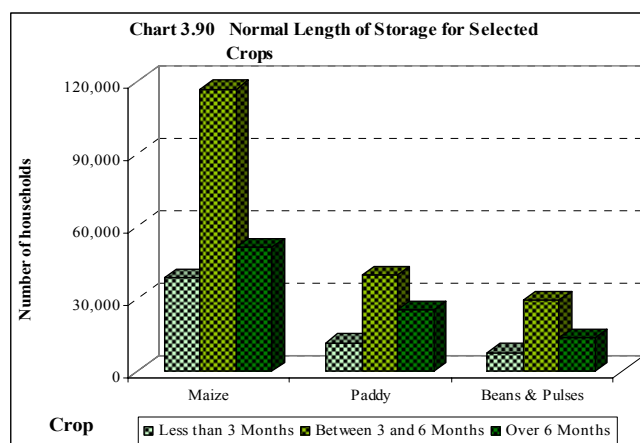


The highest percent of households using locally made traditional cribs was in Igunga (72% of the total number of households storing crops) followed by Sikonge (50%), Nzega (45%), Tabora Rural (39%), Uyui (31%) and Urambo (27%).

3.7.1.2 Duration of Storage

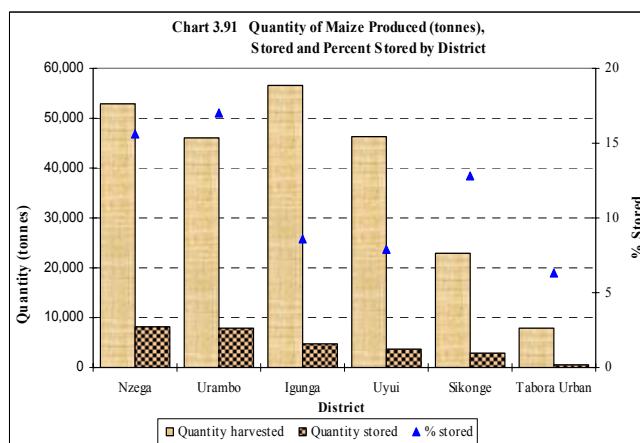
Most households (56.7% of the households storing crops) stored their produce for a period of 3 to 6 months followed by those who stored for a period of over 6 months (24.6%). The minority of households stored their crop for a period of less than 3 months (18.8%).

Most households that stored pulses stored them for a period of 3 to 6 months followed by over 6 months. A small number of households stored pulses for the period of less than 3 months (Chart 3.90).



The proportion of households that stored their produce for the duration of 3 to 6 months was highest in Tabora Urban (77.6%) followed by Urambo (57.4%), Nzega (57.2%), Uyui (56.7%), Igunga (52.9%) and Sikonge (49.1%) (Map 3.40).

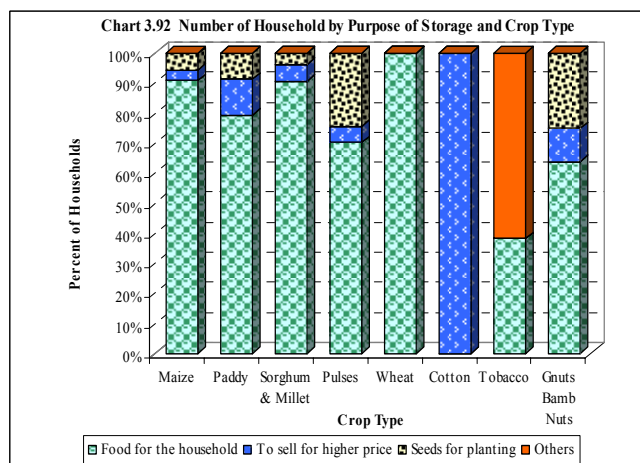
District comparison of duration of storage cannot be done for all crops combined. The analysis has therefore been done for maize only as it is the most commonly stored crop. In general, the quantity stored was related to the quantity produced. Districts with greater production had a higher percent of their crop stored as



on 1st January 2004 (Chart 3.91). However, households in Igunga district stored relatively little maize in comparison to the quantity produced indicating that the quantity stored was determined by the food and seed requirement of the household and not to sell during the “off-season” when the farm gate price of maize is higher.

3.7.1.3 Purposes of Storage

Subsistence food crops (maize, paddy, sorghum and millet, beans and pulses) are mainly stored for household consumption. The percent of households that stored maize for household consumption as the main purpose of storage was 90.8 percent followed by seed for planting. Practically all stored annual cash crops were stored for selling at a higher price (Chart 3.92).



3.7.1.4 The Magnitude of Storage Loss

About 78.5 percent of households that stored crops had little or no loss. The proportion of households that experienced a loss of more than a quarter was higher for food crops than crops that are produced for sale such as cotton, tobacco and paddy.

The proportion of households that reported a loss of more than a quarter was greatest for maize (6.4% of the total number of households that stored maize).

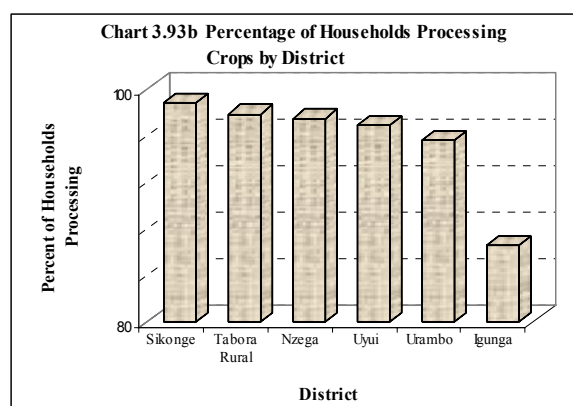
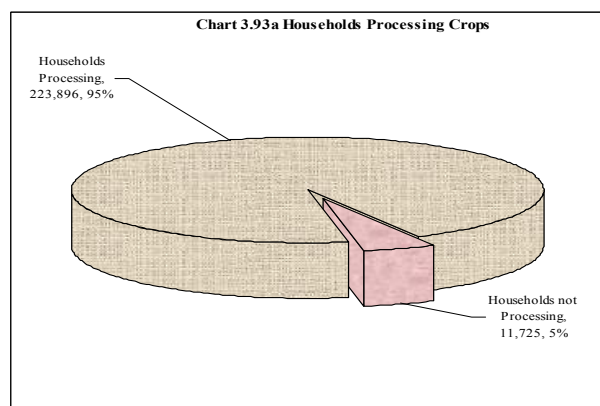
This was followed by sorghum and millet (3.4%), beans and pulses (2.4%), groundnuts/bambaranuts (1.3%) and paddy (0.7%).

Table 3.10: Number of Households Storing Crops By Estimated Storage Loss and District

District	Estimate Storage Loss				Total
	Little or no Loss	Up to 1/4 Loss	Between 1/4 and 1/2 Loss	Over 1/2 Loss	
Nzega	48,747	9,664	3,076	729	62,216
Igunga	31,956	3,628	1,041	114	36,739
Uyui	27,605	7,179	2,486	735	38,004
Urambo	38,296	10,218	3,083	488	52,084
Sikonge	16,937	1,215	684	335	19,172
Tabora Urban	7,518	1,479	405	282	9,684
Total	171,060	33,383	10,774	2,683	217,899

3.7.2 Agro processing and By-products

Agro processing refers to a process that converts a crop product from one form to another form in order to add value or increase the palatability of the crop. Agro-processing was practiced in most crop growing households in Tabora region (223,896 households, 95% of the total crop growing households) (Chart 3.93a).

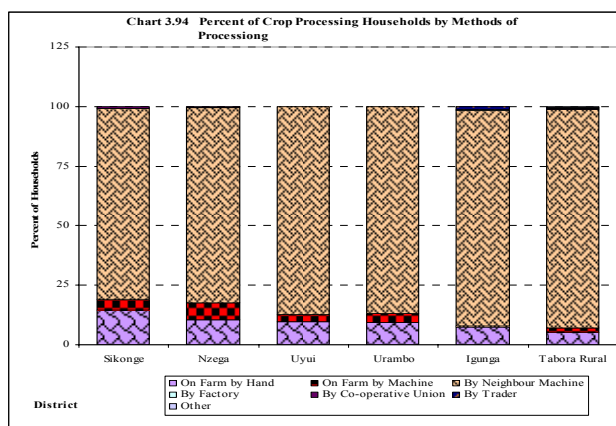


The percent of households processing crops was very high in all districts (above 80%). Igunga had the lowest percent of households processing crops (80% of crop growing households respectively) (Chart 3.93b).

3.7.2.1 Processing Methods

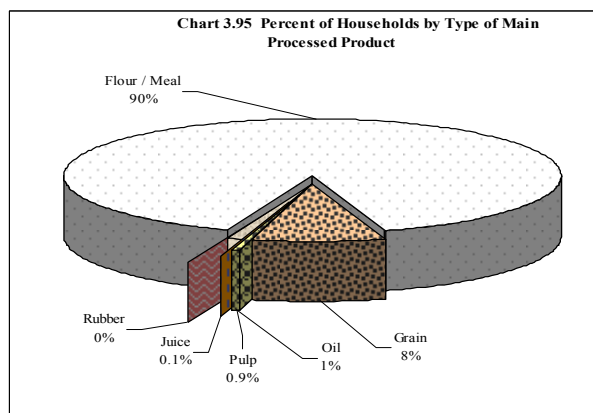
Most households processed their crops using neighbour's machines representing 85.8 percent (192,153 households). This was followed by those processing on-farm by hand (21,628 households, 9.7%) and farm machines (9,031 households, 4.0%). The remaining methods of processing were used by very few households (less than 1%).

Although processing by machine was the most common processing method in all districts in Tabora region, however district differences existed. Nzega has the highest percent of hand processing (30.8%), followed by Urambo (22.2%), and Uyui (18.3%). Processing by trader was more common in Igunga and Nzega (71% and 25% respectively), whilst processing on farm by machine was more prevalent in Nzega, Urambo and Uyui (Chart 3.94).

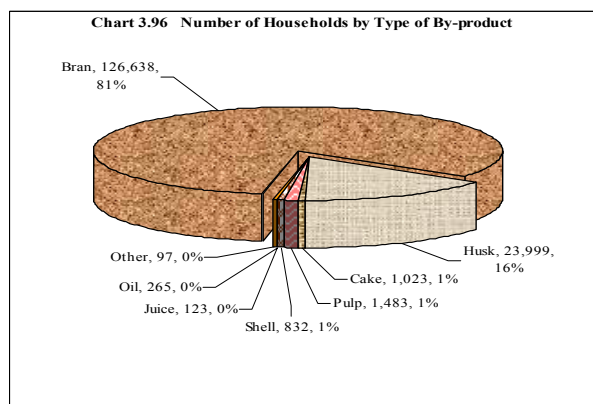


3.7.2.2 Main Agro-processing Products

Two types of products can be produced from agro-processing namely the main product and the by-product. The main product is the major product after processing and the by-product is the secondary after processing. For example the main product after processing maize is normally flour whilst the by-product is normally the bran.



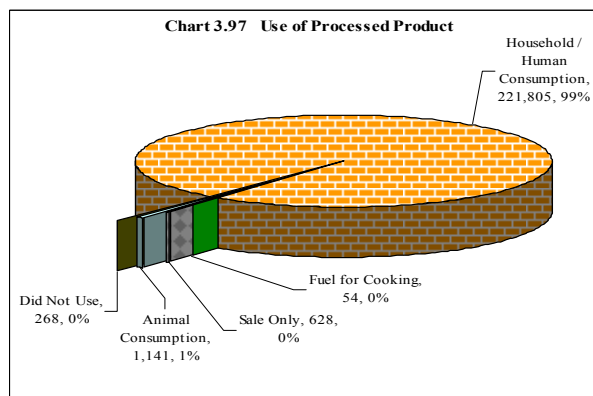
The main processed product was flour/meal with 201,164 households processing crops into flour (90%) followed by grain with 18,970 households (8%). The remaining products were produced by a small number of households (Chart 3.95).



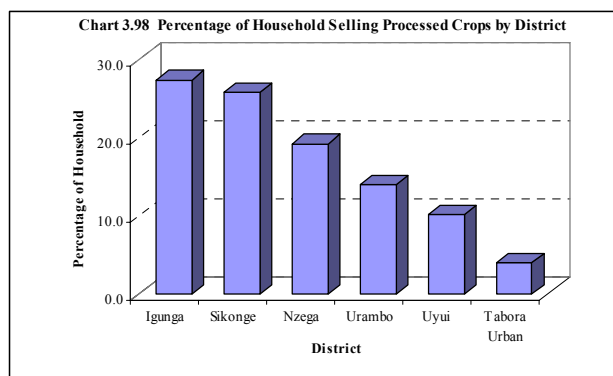
The number of households producing by-products accounted for 69 percent of the households processing crops. The most common by-product produced by crop processing households was bran with 126,638 households (81%) followed by husks (23,999 households, 16%) and pulp (1,483 households, 1%). The remaining by-products were produced by a small number of households (Chart 3.96).

3.7.2.3 Main Use of Primary Processed Products

Primary processed products were used for households or human consumption, fuel for cooking, for selling and for animal consumption. The most important use was for household/human consumption which represented 99 percent of the total households that used primary processed product (Chart 3.97). Tabora Urban was the only district that used primary products as fuel for cooking.

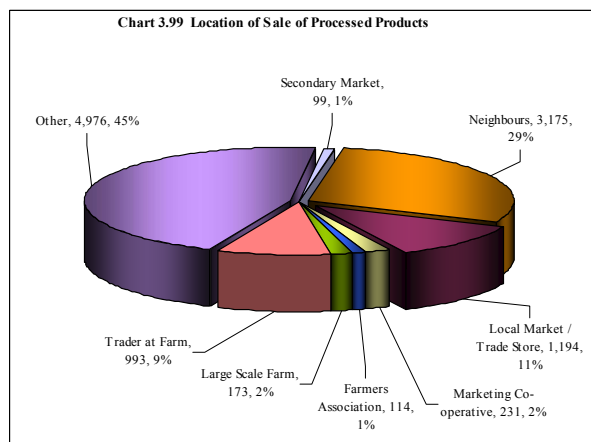


Out of 10,955 households that sold processed products, 2,981 were from Igunga (27.2% of the total number of households selling processed products in the region), followed by Sikonge with 2,809 households (25.6%), Nzega with 2,098 households (19.1%), Urambo with 1,523 households (13.9%), Uyui with 1,103 household (10.1%) and Tabora Urban with 434 households (4.0%) (Chart 3.98).

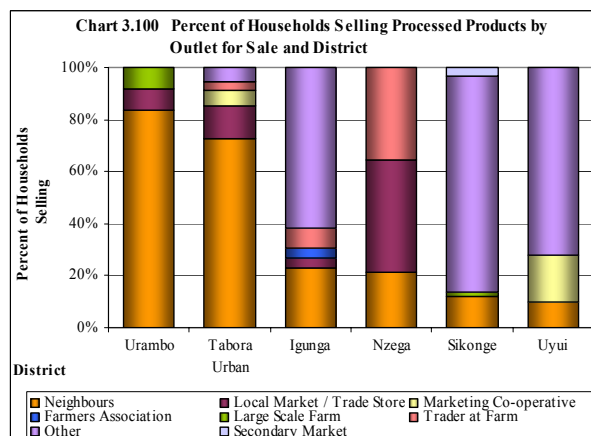


3.7.2.4 Outlets for Sale of Processed Products

Most households that sold processed products sold them to unspecified markets (4,976 households, 45% of households that sold crops). This was followed by selling to neighbours (3,175 households, 29%), local markets and trade stores (1,194 households, 11%), trader at farm (993 households, 9%), marketing co-operatives (231 households, 2%), large scale farm (173 households, 2%) farmers associations (114 households, 1%) and secondary markets (99 households, 1%) (Chart 3.99).



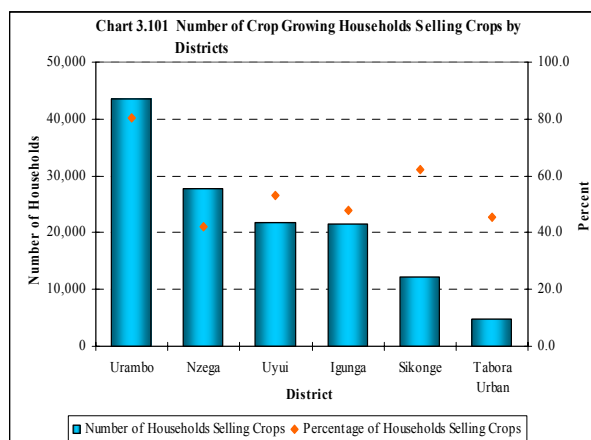
There were large differences between districts in the proportion of households selling processed products to unspecified markets with Sikonge district having the largest percent of households in the district selling to those markets (46.7%), whereas Tabora Urban had only 0.5 percent. In Nzega and Urambo no sales were made to unspecified markets. Tabora Urban and Urambo had a higher percent of households relying on neighbours than other outlets.



In Nzega, the sale of processed produce to local markets/trade stores and traders at farm were most prominent compared to other districts. The district that had the highest proportion of households selling processed products to marketing cooperative was Uyui.

3.7.3 Crop Marketing

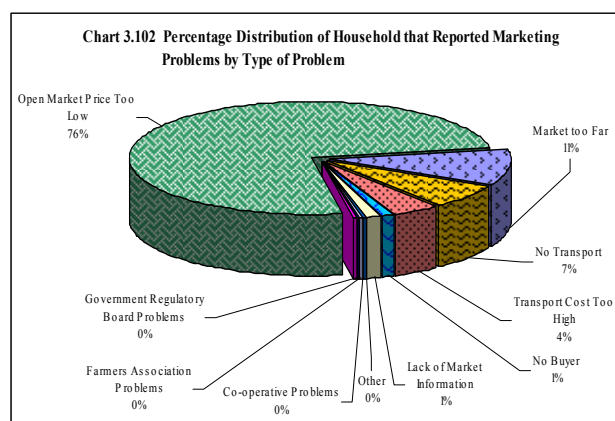
The number of households that reported selling crops was 131,403 which represent 55.7 percent of the total number of crop growing households. The percent of crop growing households selling crops was highest in Urambo (80.3%) followed by Sikonge (62.2%), Uyui (53.0%), Igunga (47.9%), Tabora Urban (45.5%) and Nzega (42.1%) (Chart 3.101 and Map 3.41).



3.7.3.1 Main Marketing Problems

Low price for agricultural produce was the main marketing problem reported by households (76% of crop growing households).

Apart from low market prices, other problems were longer distances to the markets (11%), lack of transport (7%), high transport costs (4%) and lack of market information (1%). Other marketing problems are minor and represented less than 1 percent of the total reported problems (Chart 3.102).



3.7.3.2 Reasons for Not Selling Crops

The main reason for not selling crops was reported as “insufficient production to sell”, representing 93.3 percent of the smallholders. The remaining reasons for not selling are in such low numbers that it is not appropriate to rank their importance (Table 3.12). This general trend applies to all districts.

Table 3.11 Reasons for Not Selling Crop Produce

Main Reason	Household Number	%
Production Insufficient to Sell	121,210	93.3
Other	4,094	3.2
Price Too Low	3,635	2.8
Trade Union Problems	614	0.5
Co-operative Problems	248	0.2
Market Too Far	100	0.1
Government Regulatory Board Problems	25	0.0
Total	129,925	100.0

3.8 Access to Crop Production Services

3.8.1 Access to Agricultural Credit

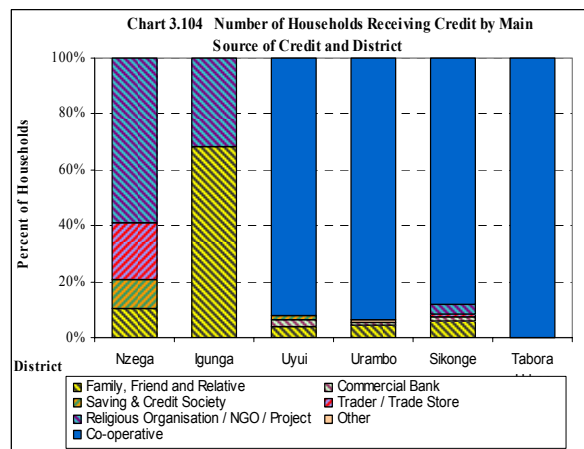
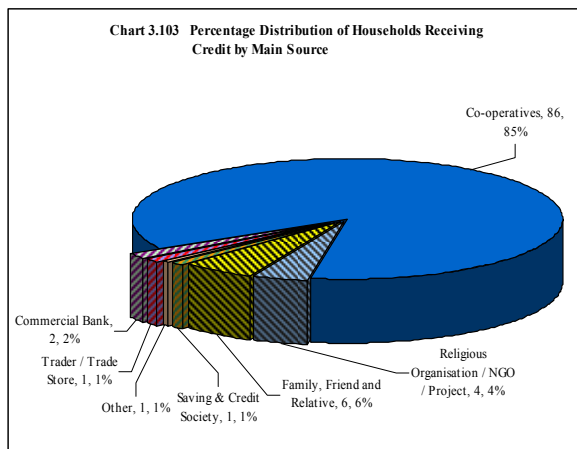
The census result shows that in Tabora region few agricultural households (25,655, 10.9%) accessed agricultural credit out of which 24,679 (96%) were male-headed households and 977 (4%) were female headed households. In Nzega, Igunga and Tabora Urban districts only male headed households got agricultural credit whereas in Uyui, Urambo and Sikonge districts both male and female headed households accessed agricultural credit (Table 3.12).

Table 3.12 Number of Agricultural Households that Received Credit by Sex of Household Head and District

District	Male		Female		Total
	Number	%	Number	%	
Nzega	1,411	100	0	0	1,411
Igunga	336	100	0	0	336
Uyui	7,629	96	309	4	7,938
Urambo	11,186	95	618	5	11,803
Sikonge	3,985	99	50	1	4,034
Tabora Urban	132	100	0	0	132
Total	24,679	96	977	4	25,655

3.8.1.1 Source of Agricultural Credit

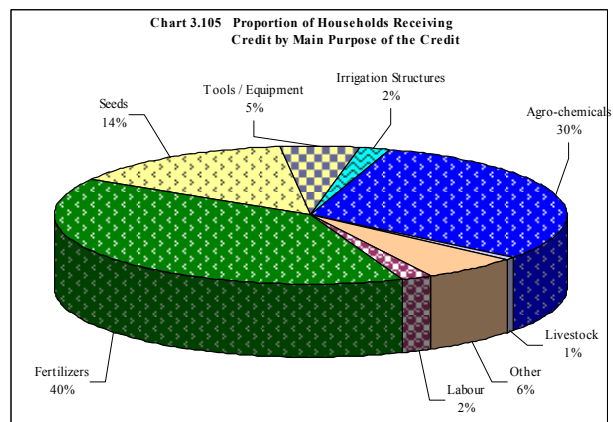
The major agricultural credit provider in Tabora region were Cooperatives which provided credit to 22,049 agricultural households (85.9% of the total number of households that accessed credit), followed by family, friends and relatives (5.6%), religious organizations/NGO/projects (4.2%), commercial bank (1.5%), traders / trade stores (1.3%), savings and credit society (1.0%) and other sources (0.5%) (Chart 3.103). Cooperatives were the sole credit providers in Tabora Urban while other credit providers were found in Urambo district only. Religious organizations, NGOs and projects were the major credit providers in Nzega district (Chart 3.104).



3.8.1.2 Use of Agricultural Credit

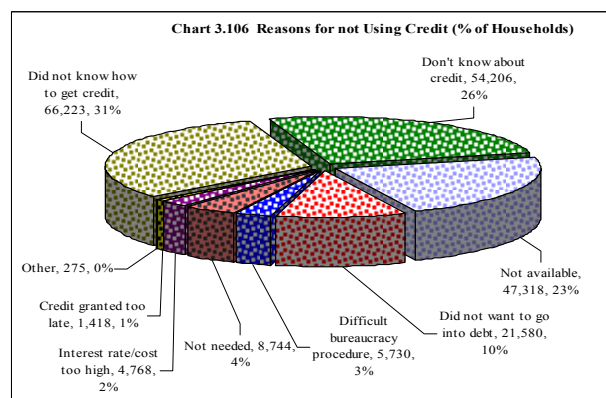
A large proportion of the agricultural credit provided to agricultural households in the region was used on fertilizers (40%)

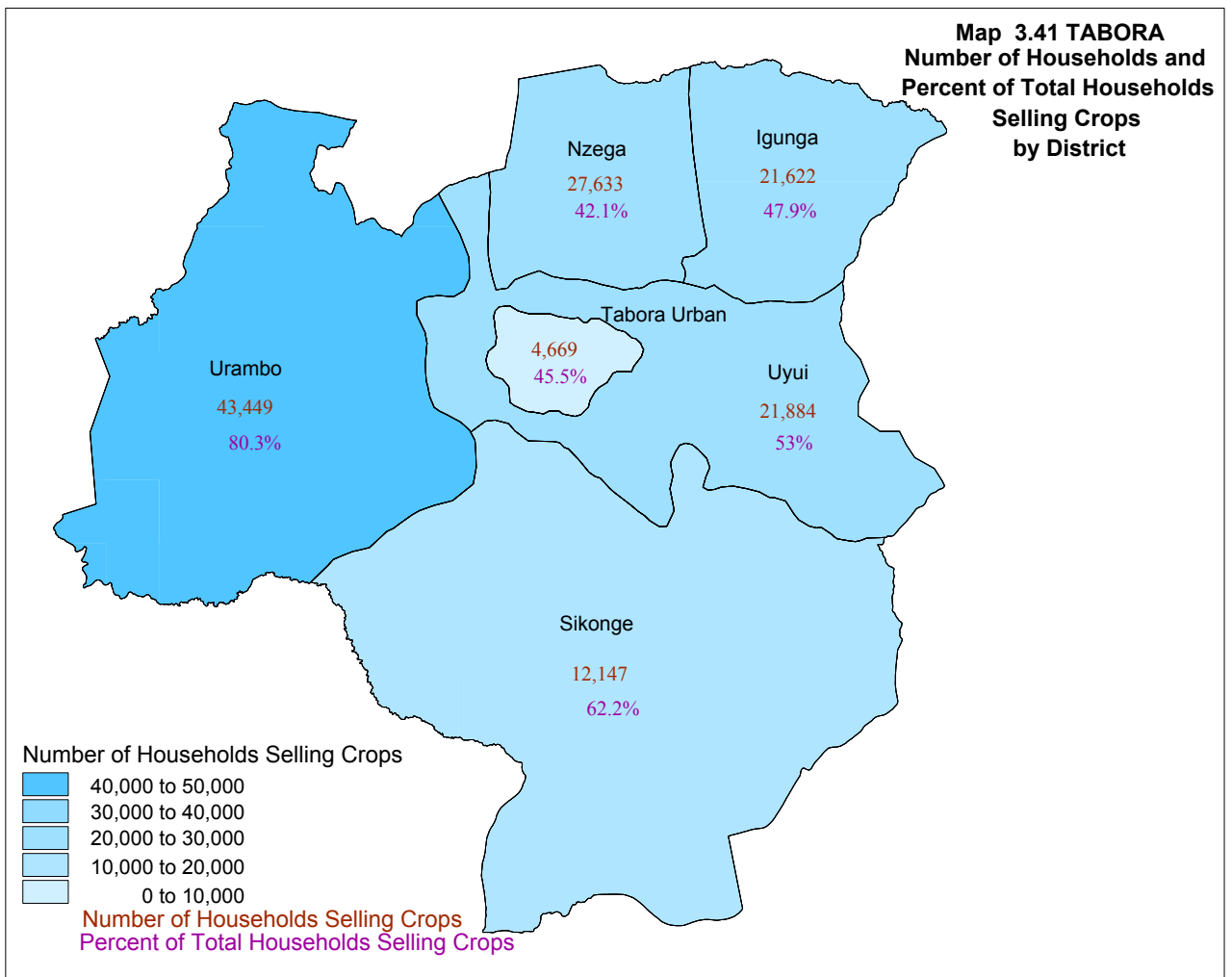
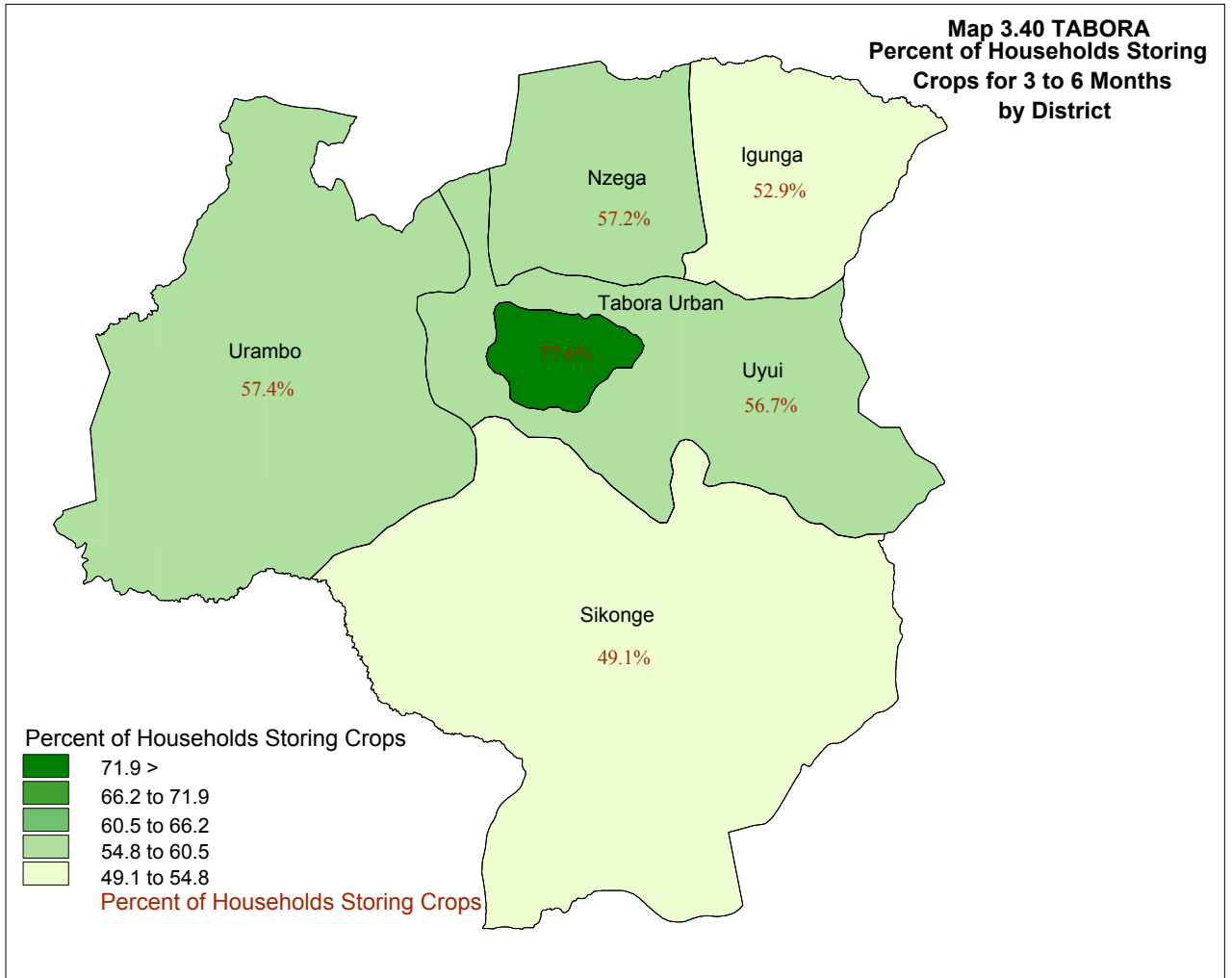
and other agro-chemicals (30%) followed by seeds (14%). The proportion of credits intended to be used for livestock rearing, irrigation structures, tools, equipment and hiring labour was very low (Chart 3.105).



3.8.1.3 Reasons for Not Using Agricultural Credit

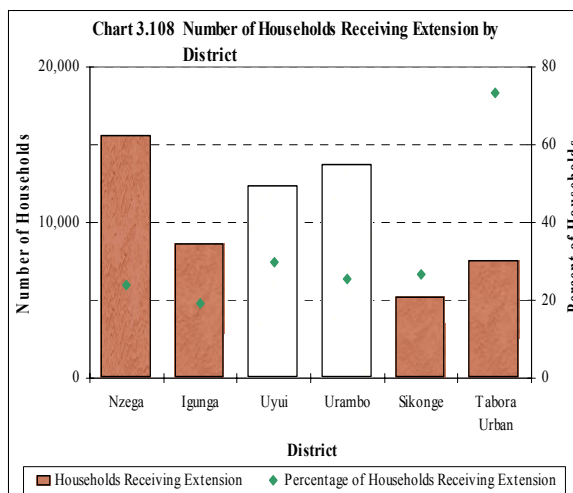
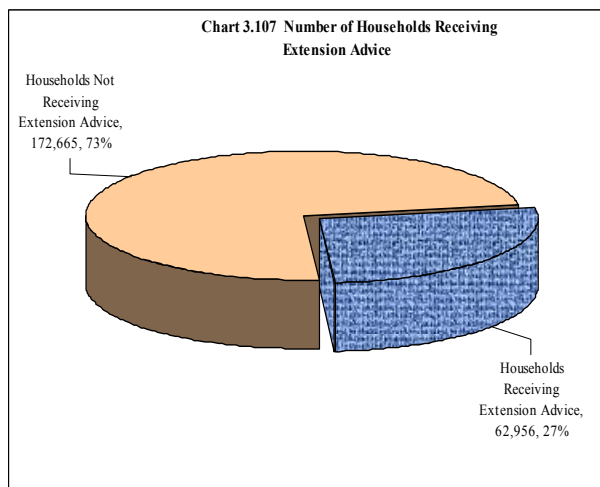
The main reason for not using agricultural credit as a source of finance was little credit awareness accounting to 57 percent of the agricultural households (“did not know how to get credit” and “don’t know about credit”). This was followed by households reporting the un-availability of credit (23%), followed by “not wanting to get into debt” (10%) and ‘credit not needed’ (4%). The rest of the reasons were collectively reported by less than 8 percent of the households.





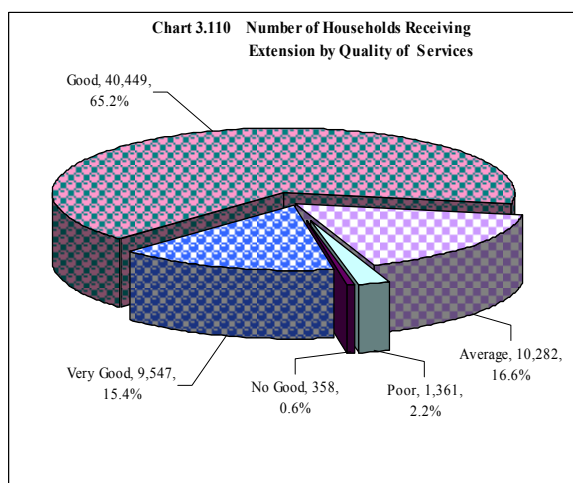
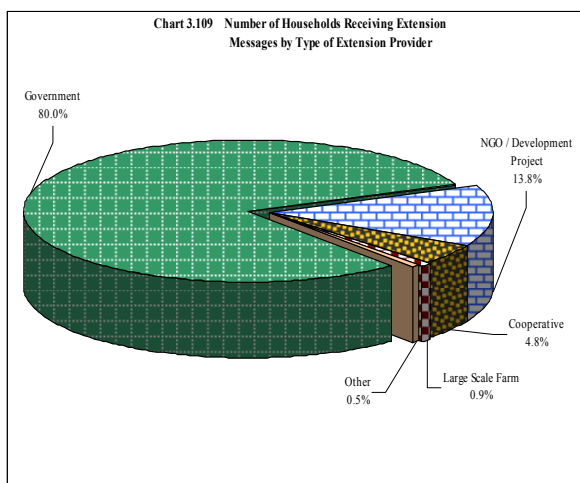
3.8.2 Crop Extension

The number of Agricultural households that received crop extension was 62,956 (27% of total crop growing households in the region) (Chart 3.107). Some districts had more access to extension services than others, with Tabora Urban having a relatively high proportion of households (73%) that received crop extension messages in the district followed by Uyui (30%), Sikonge (27%), Urambo (25%), Nzega (24%) and Igunga (19%). (Map 3.42)



3.8.2.1 Sources of Crop Extension Messages

Of the households receiving extension advice the Government provided the greatest proportion (80%, 49,275 households). NGOs provided 13.8 percent, cooperatives (4.8%), large scale farms (0.9%) and the remaining providers (0.5%) (Chart 3.109). District differences existed with the proportion of the households receiving advice from government services ranging from between 54.2 percent in Urambo to 98.6 percent in Igunga.



3.8.2.2 Quality of Extension

On the quality of extension, 65.2 percent of the households receiving extension ranked the service as being good followed by average (16.6 %), very good (15.4%), poor (2.2%) and no good (0.6%) (Chart 3.110). However, care should be exercised when making decisions on quality of extension and also other variables in the extension report as all the enumerators were extension agents and some degree of bias is expected.

3.9 Access to Inputs

Access to inputs in this section refers to all crop growing households in Tabora region regardless of whether the households grew annual or permanent crops. In previous sections the reference was on annual crops only. Because of this, some of the figures presented in this section may be slightly different from those in previous section on inputs use

Table 3.13 Access to Inputs

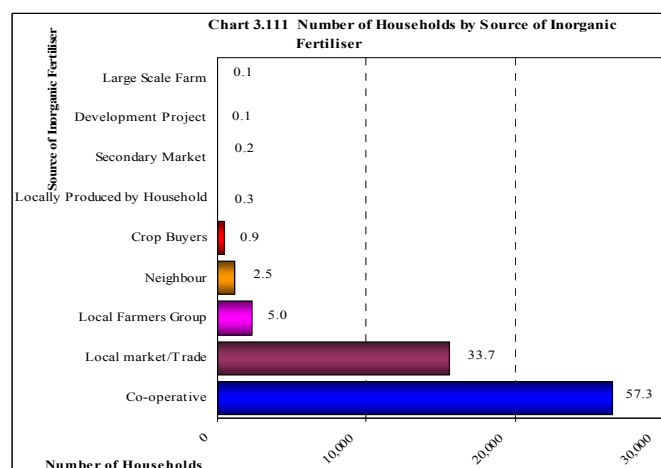
Type of Input	Households With Access to Input		Households Without Access to Inputs	
	Number	%	Number	%
Farm Yard Manure	65,279	28	170,342	72
Improved Seeds	45,706	19	189,914	81
Insecticides/Fungicide	47,859	20	187,761	80
Compost Manure	15,368	7	220,253	93
Inorganic Fertilizers	46,287	20	189,334	80
Herbicides	2,056	1	233,565	99

(Section 3.5). Data on source of inputs is only found in this section and it applies to both annual and permanent crops.

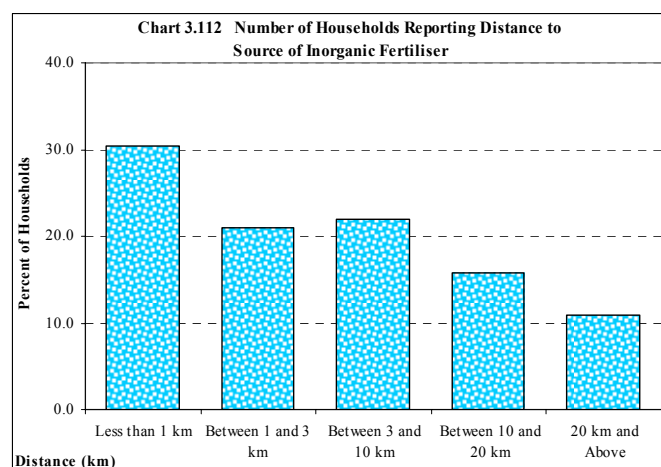
A small number of households use inputs and this is particularly true of inputs that are not produced on farm eg., improved seeds, inorganic fertilizers, insecticides, fungicides and herbicides. In Tabora region farm yard manure was used by 65,279 households which represent 28 percent of the total number of crop growing households. This was followed by households using insecticides/fungicides (20%), inorganic fertilizers (20%), improved seeds (19%), compost manure (7%) and herbicides (1%) (Table 2.13).

3.9.1 Inorganic Fertilisers

Smallholders that use inorganic fertiliser in Tabora mostly purchased them from the local cooperatives (57.3% of the total number of inorganic fertiliser users), from the local markets (33.7%) and from local farmers groups (5%). The remaining sources of inorganic fertilisers were of minor importance (Chart 3.111).



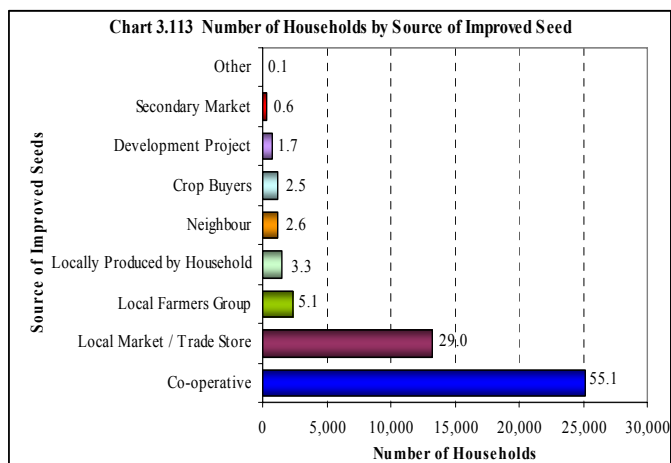
Access to inorganic fertiliser was mainly less than 10 km from the household with most households residing less than 1 km from the source (30.5%), followed by between 3 and 10 km (21.9%) and between 1 and 3 km (21%) (Chart 3.112). Due to the very small number of households using inorganic fertilisers coupled with the small number of households responding to “not available” (20%) as the reason for not using, it may be assumed that access is not the main reason for not using them. Other reasons such as cost are more important with 73 percent of households responding to cost factors as the main reason for not using the fertilizers.



In other words, if the cost was affordable the demand would be higher and inorganic fertiliser would be made more available. More smallholders use inorganic fertilisers in Urambo than in other districts in Tabora region (46.1% of households using inorganic fertilisers), followed by Uyui (23.8%) and Sikonge (14.6%). Other districts use very little inorganic fertiliser.

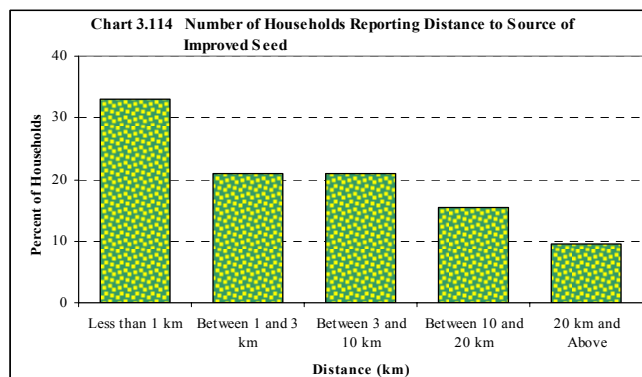
3.9.2 Improved Seeds

The percent of households that used improved seeds was 19.4 percent of the total number of crop growing households. Most of the improved seeds were obtained from the cooperatives (55.1%) followed by from local markets/trade stores (29%). Other less important sources of improved seeds were from local farmers group (5.1%), locally produced by households (3.3%), neighbours (2.6%), crop buyers (2.5%) and development projects (1.7%). Only 0.6 percent and 0.1 percent of households using improved seeds were from secondary markets and other sources respectively (Chart 3.113).



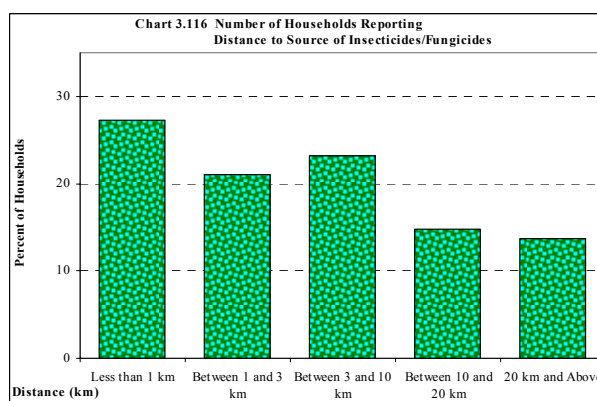
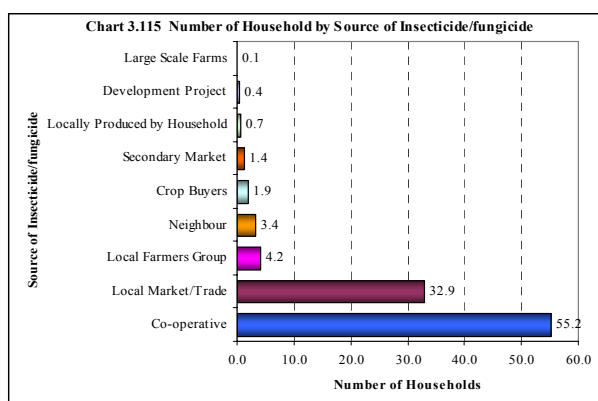
Access to improved seeds was mainly less than 10 km from the household with most households residing less than 1 km from the source (33%), followed by between 1 and 3 km (21%) and between 3 and 10 km (21%) (Chart 3.114).

The districts that used improved seeds most were Igunga (35.7 percent of the total number of households in the district), followed by Urambo (20.1%). Use of improved seeds in other districts is of minor importance (Map 3.42).



3.9.3 Insecticides and Fungicide

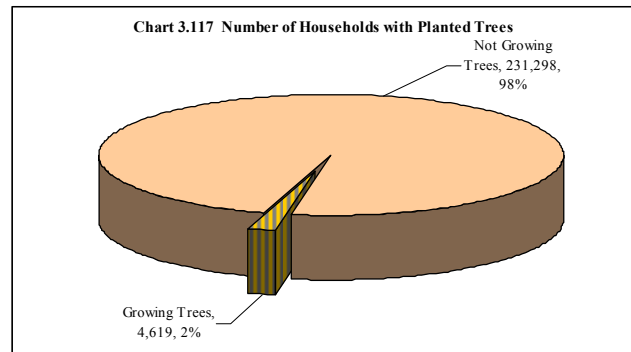
Most smallholder households using insecticides and fungicides mainly purchased them from cooperatives (55.2% of the total number of fungicides users) and local markets/trade stores (32.9%). Other sources of insecticides/fungicides were of minor importance (Chart 3.115). Chart 3.116 shows that there is no distinct pattern for the number of households with varying distances from the source of insecticides/fungicides.



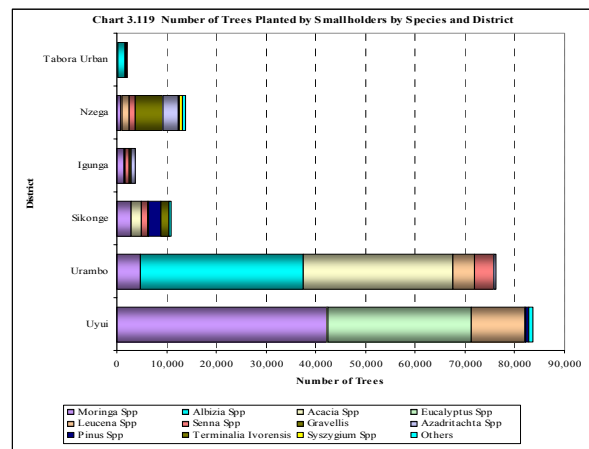
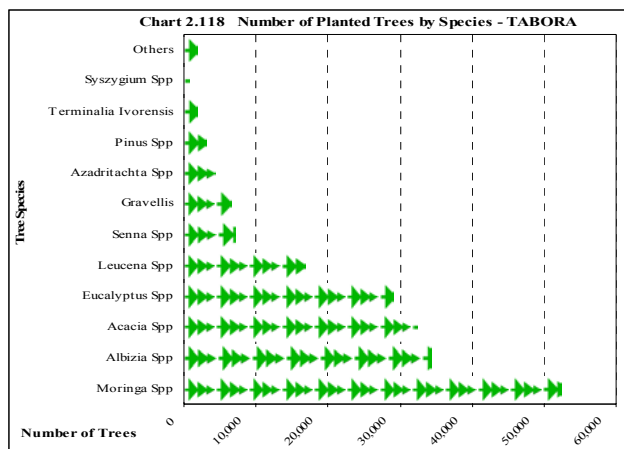
The small number of households using insecticides/fungicides coupled with the 18 percent of households responding to “not available” as the reason for not using them, it may be assumed that access is not the main reason for not using them. Other reasons such as cost are more important with 72 percent of households responding to cost factor as the main reason for not using them. In other words, if the cost was affordable, the demand would be higher and insecticides/fungicides would be made more available. Fungicides were mostly used in Urambo district (33.7 percent of the total number of households that use fungicide in the region), followed by Uyui (24.7%), Igunga (12.9%) and Sikonge (12.7%). Insecticides/fungicides use in other districts is of minor importance.

3.10 Tree Planting

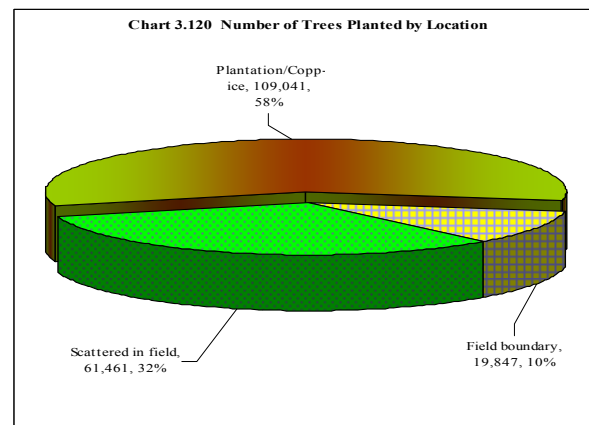
The number of households involved in tree farming was 4,619 representing 2 percent of the total number of agriculture households (Chart 3.117).



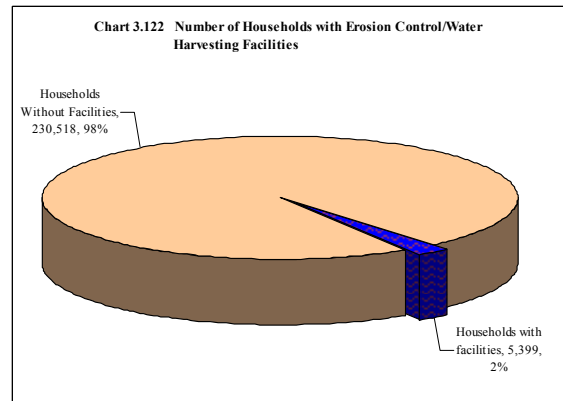
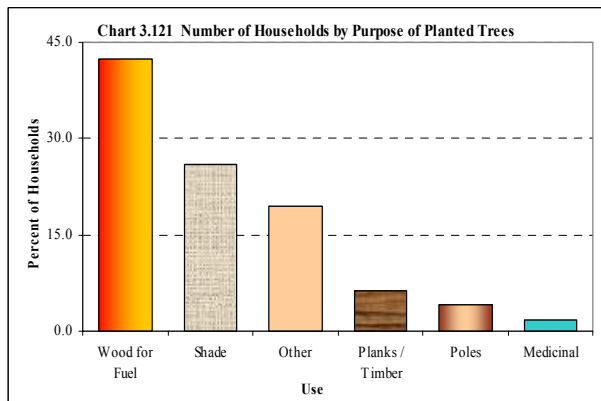
The number of trees planted by smallholders on their allotted land was 190,349 trees. The average number of trees planted per household planting trees was 41.



The main species planted by smallholders was Moringa spp (52,394 trees, 27.5%), followed by Albizia Spp (34,292, 18.0%), then Acacia Spp (32,393, 17.0%) and Eucalyptus Spp (29,003 trees, 15.2%). The remaining trees species were planted in comparatively small numbers (Chart118.). Uyui has the largest numbers of smallholders with planted trees than any other district (44.0%) and the trees were dominated by Moringa Spp. and Eucalyptus Spp. This is followed by Urambo (40.0%) with the trees dominated by Albizia Spp and Acacia Spp and Nzega (7.3%) where the trees were mainly Gravellis Spp. (Chart 3.119 and Map 3.45.). Smallholders mostly plant trees on plantation or coppice. The proportion of households that plant on plantation is 58 percent, followed by scattered around fields (32%) and then trees planted on the field boundaries (10%) (Chart 3.120).



The main purpose of planting trees was to obtain wood for fuel (42.57%). This was followed by shade (25.9%), planks/timber (6.3%), poles (4.1%) and medicinal (1.7%). Other purposes were reported by 19.4 percent of the households (Chart 3.121, Map 3.44).

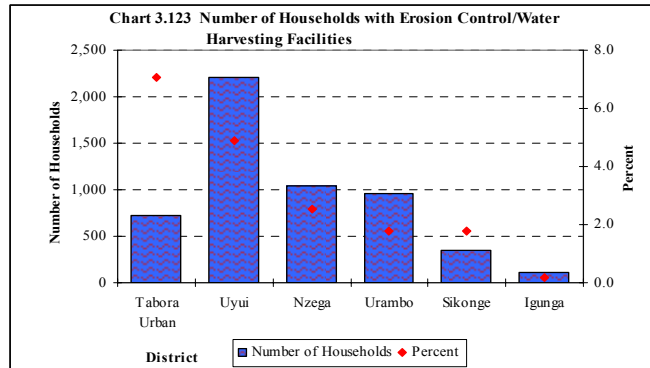


3.11 Irrigation and Erosion Control Facilities

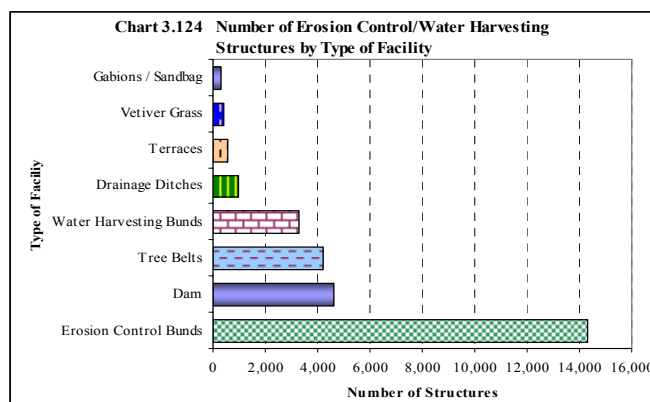
Erosion control and water harvesting facilities are grouped together as they normally have dual purposes of reducing erosion and increasing the amount of water available for crop production.

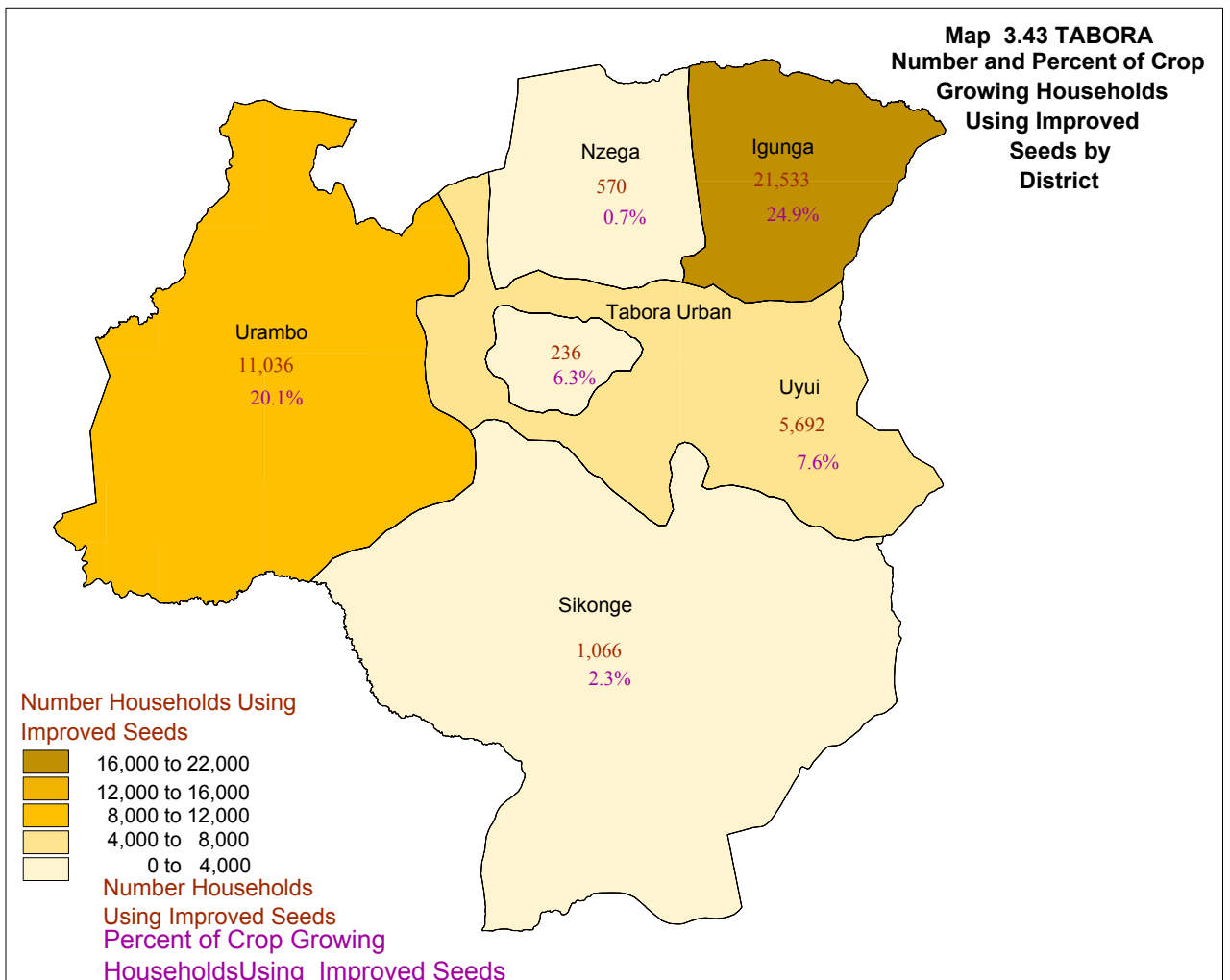
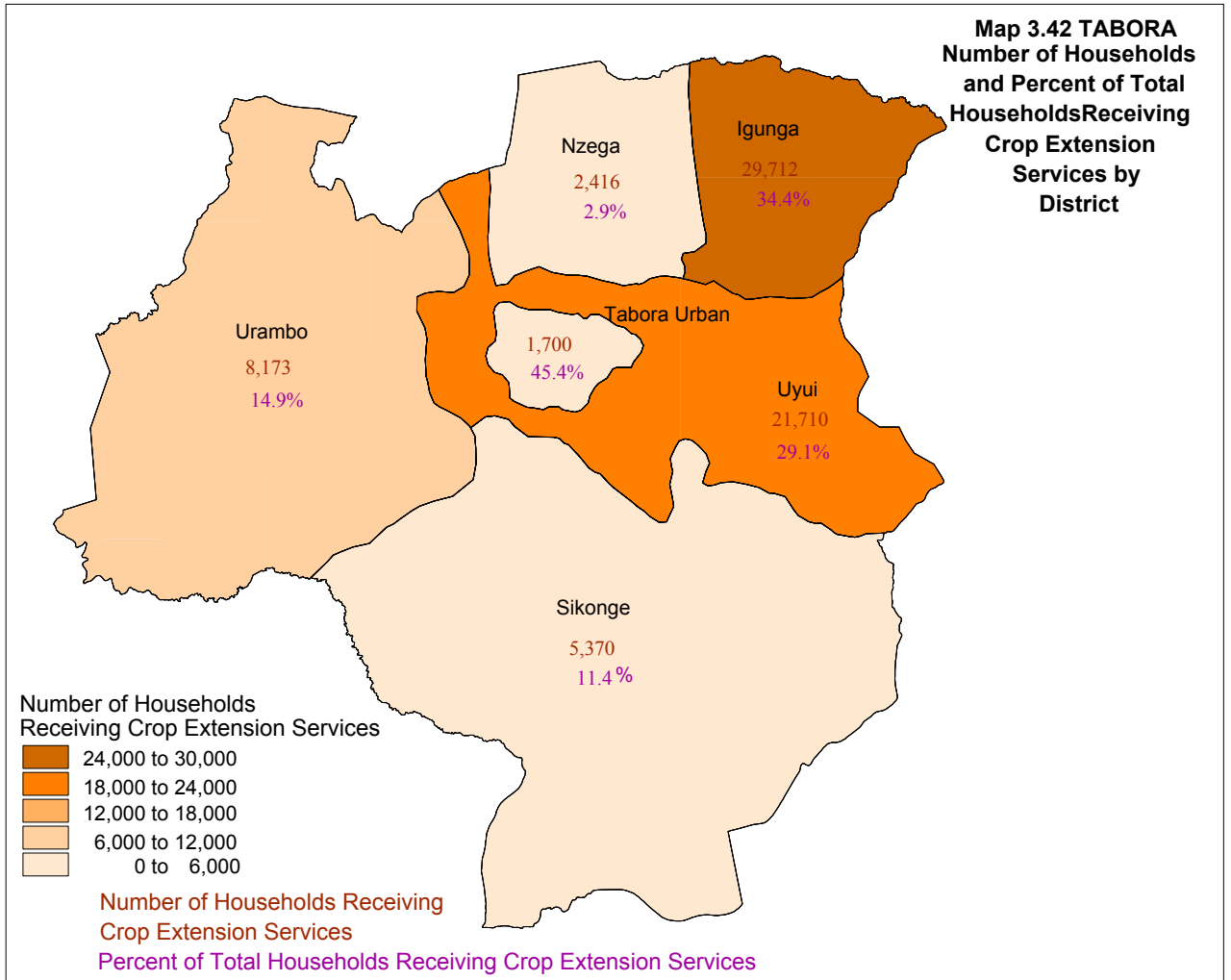
The number of agricultural households that had soil erosion and water harvesting facilities on their farms was 5,399 which represented 2 percent of the total number of agricultural households in the region (Chart 3.122).

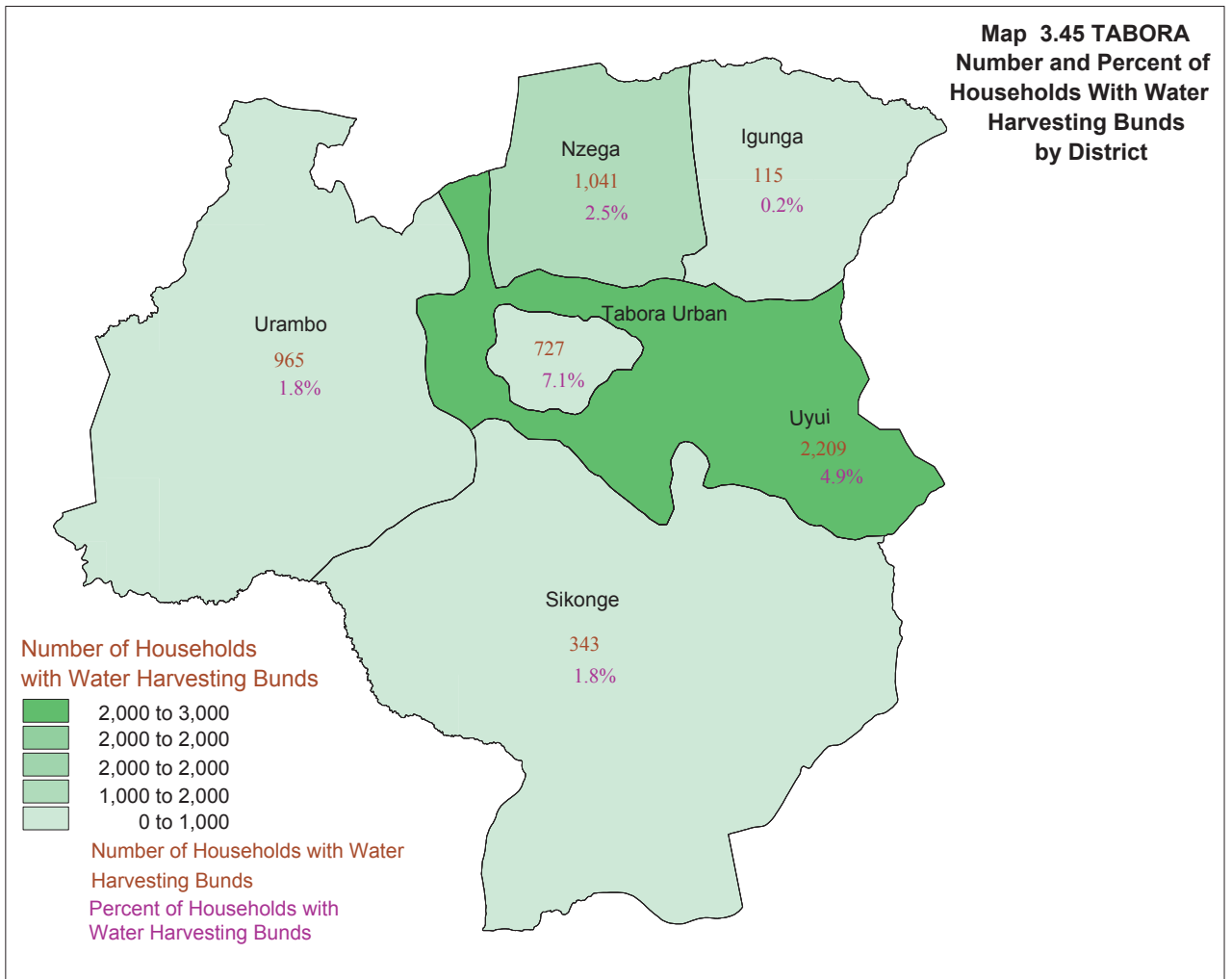
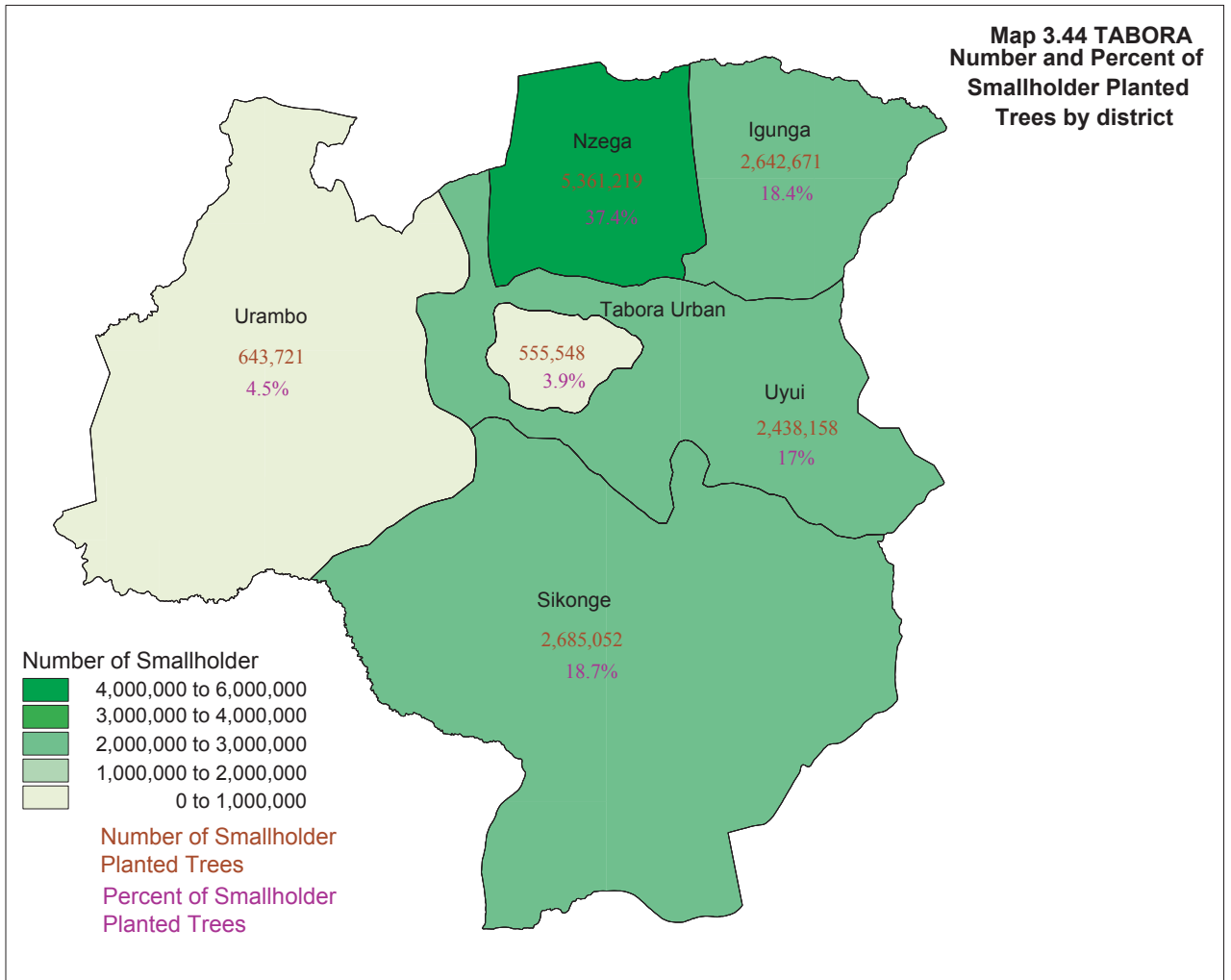
The proportion of households with soil erosion control and water harvesting facilities was highest in Tabora Urban (7.1%) followed by Uyui (4.9%), Nzega (2.5%), Urambo (1.8%), Sikonge (1.8%) and Igunga (0.2%) (Chart 3.123). Erosion control bunds accounted for 50 percent of the total number of structures, followed by dam (16.1%), tree belts (14.7%), water harvesting bunds (11.4%), drainage ditches (3.4%), terraces (1.9%), vetiver grass (1%) and gabions / sandbag (1.1%) (Chart 3.124 and Map 3.45).



Erosion control bunds, dam and tree belts together had 23,131 structures. This represented 81 percent of the total structures in the region. The remaining 19 percentages were shared among the rest of the erosion control methods mentioned above. Urambo and Uyui districts had 16,859 erosion control structures (59 percent of the total erosion structures in the region).







3.12 LIVESTOCK RESULTS

3.12.1 Cattle Production

The total number of cattle in the region was 1,568,691. Cattle are the dominant livestock type in the region followed by goats, sheep and pigs. The region had 9.3 percent of the total cattle population on Tanzania Mainland.

3.12.1.1 Cattle Population

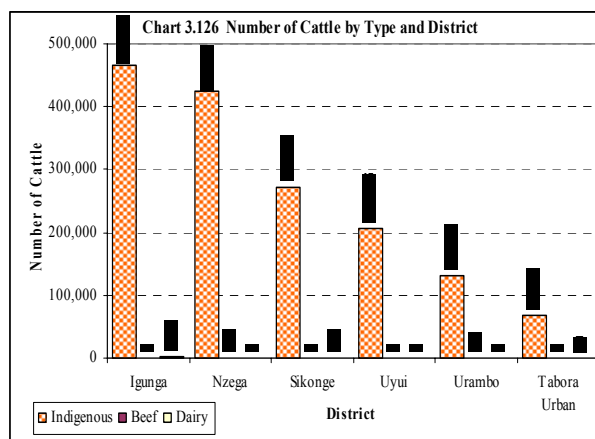
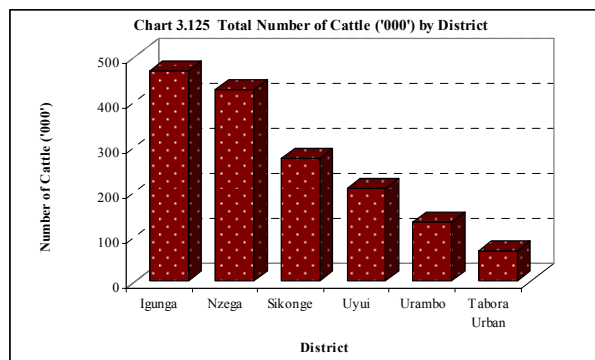
The number of indigenous cattle in Tabora region was 1,566,169 (99.8 % of the total number of cattle in the region), 1,851 cattle (0.12%) were dairy breeds and 671 cattle (0.04%) were beef breeds.

The census results show that 65,925 agricultural households in the region (27.9% of total agricultural households) kept 1.6 million cattle. This was equivalent to an average of 24 heads of cattle per cattle-keeping-household. The district with the largest number of cattle was Igunga which had about 466,892 cattle (29.8% of the total cattle in the region). This was followed by Nzega (425,021 cattle, 27.1%), Sikonge (272,100 cattle, 17.3%), Uyui (205,865 cattle, 13.1%) and Urambo (131,000 cattle, 8.4%). Tabora Urban had the least number of cattle (67,812 cattle, 4.3%) (Chart 3.126 and Map 3.46). Igunga district had the highest density (176 head per km²) (Map 3.47).

Although Igunga district had the largest number of cattle in the region, most of it was indigenous. Also the district had the largest number of dairy cattle but it had no beef cattle. In general, the number of beef cattle in the region was insignificant (Chart 3.126).

3.12.1.2 Herd Size

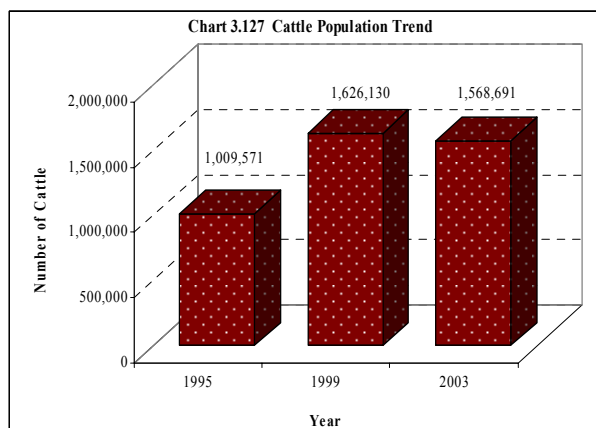
Twenty four percent of the cattle-rearing households had herds of size 1-5 cattle with an average of three cattle per household. Herd sizes of 6-30 accounted for about 38 percent of all cattle in the region. Only 15.4 percent of the cattle rearing households had herd sizes of 31- 100 cattle. About 82.5 percent of total cattle rearing households had herds of size 1-30 cattle and owns 41 percent of total cattle in the region, resulting in an average of 12 cattle per cattle rearing household. There were about 782 households with herd sizes of more than 151 cattle each (278,198 cattle in total) resulting in an average of 356 cattle per household.



3.12.1.3 Cattle Population Trend

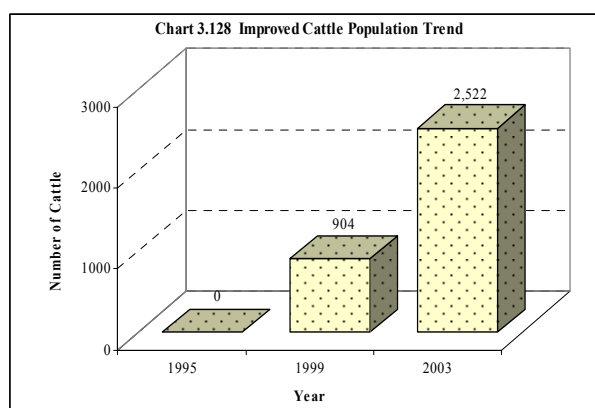
Cattle population in Tabora increased during the period of eight years from 1,009,571 in 1995 to 1,568,691 cattle in 2003. This implies an overall annual positive growth rate of 5.7 percent (Chart 3.127).

However, there was a very sharp increase in number of cattle for the period of four years from 1995 to 1999 at the rate of 12.7 percent whereby the number increased from 1,009,571 to 1,626,130. The number of cattle is estimated to have decreased from 1,626,130 in 1999 to 1,568,691 in 2003 at the rate of -0.9 percent.



3.12.1.4 Improved Cattle Breeds

The total number of improved cattle in Tabora region was 2,522 (1,851 dairy and 671 improved beef). The dairy cattle constituted 0.11 percent of the total cattle and 73.4 percent of improved cattle in the region. The number of beef cattle in the region was small constituting 26.6 percent of the total number of the improved cattle and 0.04 percent of the total cattle. The number of improved cattle increased from zero in 1995 to 2,522 in 2003 whilst the number increased from 904 in 1999 to 2,522 in 2003 at the growth rate of 29%.

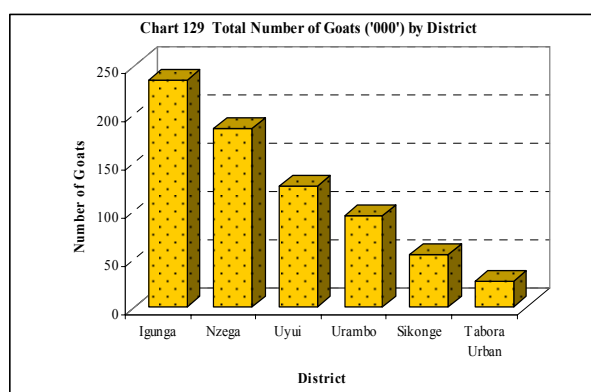


3.12.2. Goat Production

Goat rearing was the second most important livestock keeping activity in the region followed by sheep and pig rearing. In terms of total number of goats on the Mainland, Tabora region ranked 6 out of the 21 regions with 6.1 percent of the total number goats on the Mainland.

3.12.2.1 Goat Population

The number of goat-rearing-households in Tabora region was 65,487 (28% of all agricultural households in the region) with a total of 718,996 goats giving an average of 11 head of goats per goat-rearing-household. Igunga had the largest number of goats (234,077 goats, 32.6% of all goats in the region), followed by Nzega (185,172 goats, 25.8%), Uyui (124,998 goats, 17.4%) and Urambo (93,826 goats, 13.0). Sikonge and Tabora Urban had the least number of goats (54,087 goats, 7.5% and 26,836 goats, 3.7% respectively) (Chart 3.129 and Map 3.48). Igunga district had also the highest density of goats (88 head per km²) (Map 3.49).



3.12.2.2 Goat Herd Size

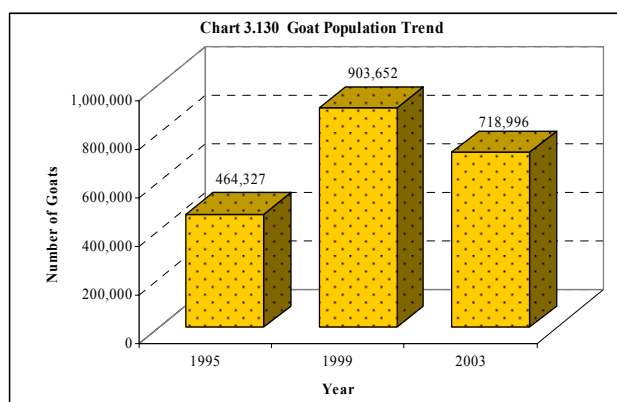
Twenty four percent of the goat-rearing households had herd sizes of 1-4 goats with an average of 3 goats per goat rearing household. Seventy seven percent of total goat-rearing households had herd size of 1-14 goats and owned 47 percent of the total goats in the region resulting in an average of 7 goats per goat-rearing households. The region had 2,188 households (3%) with herd sizes of 40 or more goats each (113,118 goats in total), resulting in an average of 52 goats per household.

3.12.2.3 Goat Breeds

Goat husbandry in the region was dominated by the indigenous breeds that constituted 98.4 percent of the total goats in Tabora region. Improved goats for meat and diary goats constituted 0.83 and 0.81 percent of total goats respectively.

3.12.2.4 Goat Population Trend

The overall annual growth rate of goat population from 1995 to 2003 was 5.6 percent. This positive trend implies eight years of population increase from 464,327 in 1995 to 718,996 in 2003. The number of goats increased from 464,327 in 1995 at an estimated annual rate of 18.1 percent to 903,652 in 1999. From 1999 to 2003, the goat population decreased at an annual rate of -5.5 percent (Chart 130).

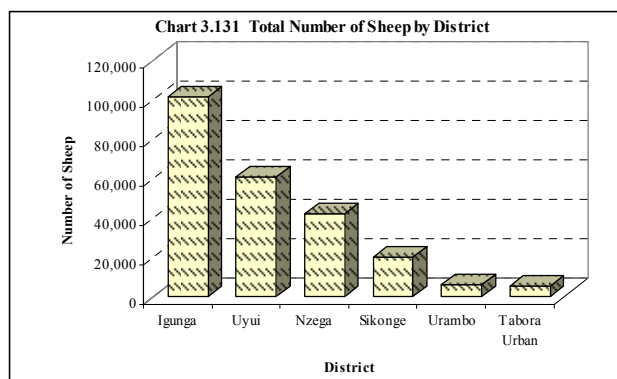


3.12.3. Sheep Production

Sheep rearing was the third most important livestock keeping activity in Tabora region after cattle and goats. The region ranked 6 out of 21 Mainland regions and had 6 percent of all sheep on Tanzania Mainland.

3.12.3.1 Sheep Population

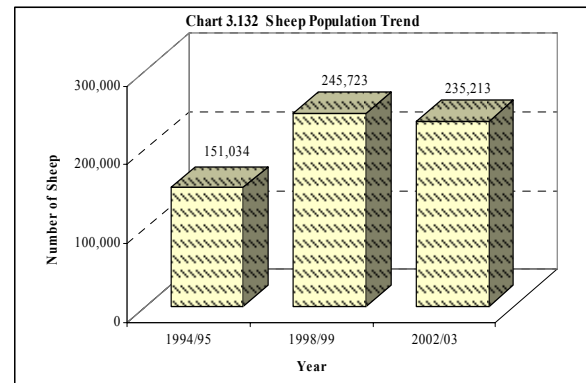
The number of sheep-rearing households was 28,126 (12% of all agricultural households in Tabora region) rearing 235,213 sheep, giving an average of 8 heads of sheep per sheep-rearing household. The district with the largest number of sheep was Igunga with 101,570 sheep (43.2% of total sheep in Tabora region) followed by Uyui (60,347 sheep, 25.7%), Nzega (42,118 sheep, 17.9%) and Sikonge (19,838 sheep, 8.4%). Urambo and Tabora Urban had the least number of sheep [6,019 sheep (2.6%) and 5,321 sheep (2.3%) respectively] (Chart 3.131 and Map 3.50). Igunga district also had the highest density of sheep (38 head per km²) (Map 3.51).



Sheep rearing was dominated by indigenous breeds that constituted 88 percent of all sheep kept in the region. Only 12 percent of the total sheep in the region were improved breeds.

3.12.3.2 Sheep Population Trend

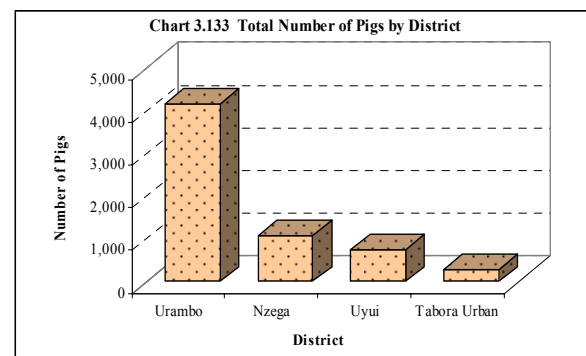
The overall annual growth rate of the sheep population for the eight year period from 1995 to 2003 is estimated to be 5.7 percent. The population increased at an average annual rate of 13 percent from 151,034 in 1995 to 245,723 in 1999. From 1999 to 2003, sheep population decreased at an annual rate of -1.1 percent (Chart 3.132).



3.12.4. Pig Production

Piggery is the least important livestock keeping activity in the region after cattle, goats and sheep. The region ranked 16 out of 21 Mainland regions and had 0.64 percent of the Mainland total pigs.

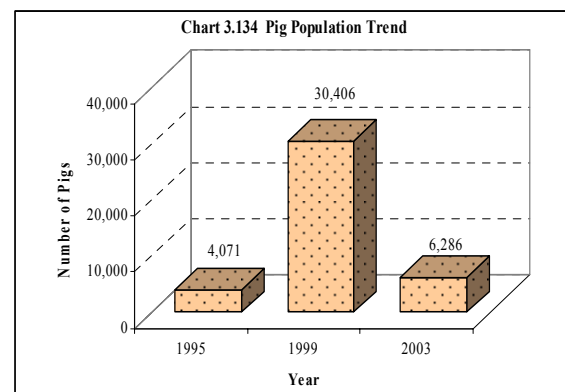
The number of pig-rearing agricultural households in Tabora region was 2,719 (1.2% of the total agricultural households in the region) rearing 6,286 pigs. This gives an average of 2 pigs per pig-rearing household. The district with the largest number of pigs was Urambo with 4,172 pigs (66.4% of the total pig population in the region) followed by Nzega (1,083 pigs,



17.2%), Uyui (739 pigs, 11.8%) and Tabora Urban (292 pigs, 4.6%) (Chart 3.133 and Map 3.52). However Urambo district had the highest density of pigs (0.5 head per km²) (Map 3.53). There were no pigs in Igunga and Sikonge districts.

3.12.4.1 Pig Population Trend

The overall annual growth rate of the pig population over the eight-year period from 1995 to 2003 was 5.6 percent. During this period the population grew from 4,071 to 6,286. The pig population increased very much from 4,071 in 1995 to 30,406 in 1999 at a rate of 65.3 percent. The growth rate dropped to -32.6 percent during the following four years from 1999 to 2003 in which pig population decreased from 30,406 to 6,286 (Chart 3.134).



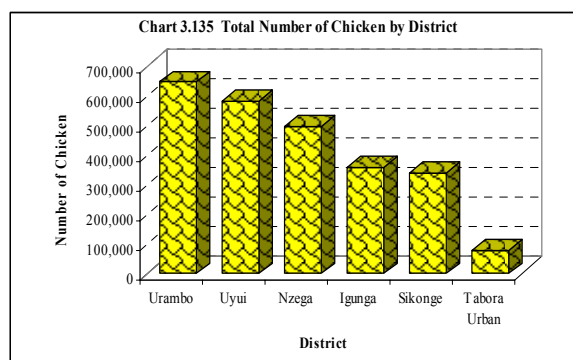
3.12.5 Chicken Production

The poultry sector in Tabora region was dominated by chicken production. The region contributed 7.5 percent to the total chicken population on Tanzania Mainland.

3.12.5.1 Chicken Population

The number of households keeping chicken was 168,339 raising about 2,507,469 chickens. This gives an average of 15 chickens per chicken-rearing household. In terms of total number of chickens in the country, Tabora region was ranked fourth out of the 21 Mainland regions.

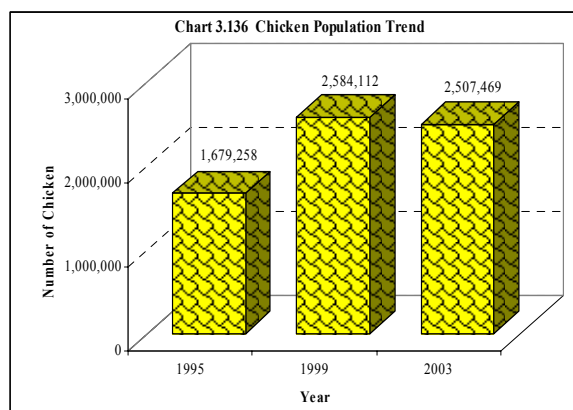
The District with largest number of chickens was Urambo with 647,562 chickens (25.8% of the total number of chickens in the region) followed by Uyui (582,803, 23.2%), Nzega (496,490, 19.8%), Igunga (360,864, 14.4%) and Sikonge (341,572, 13.6%). Tabora Urban had the smallest number of chickens (78,178, 3.1%) (Chart 3.135 and Map 3.54). However Nzega district had the highest density of chickens (201 chickens per km²) (Map 3.55).



3.12.5.2 Chicken Population Trend

The overall annual chicken population growth rate during the eight-year period from 1995 to 2003 was 5.1 percent. The population increased at a rate of 11.4 percent from 1995 to 1999 after which it decreased by -0.7 percent for the remaining four years from 1999 to 2003 (Chart 3.136).

About 99.6 percent of all chicken in Tabora region were of indigenous breed. The dominance of indigenous breed makes the population trend for the indigenous chicken more-or-less the same as that of the total chickens in the region.



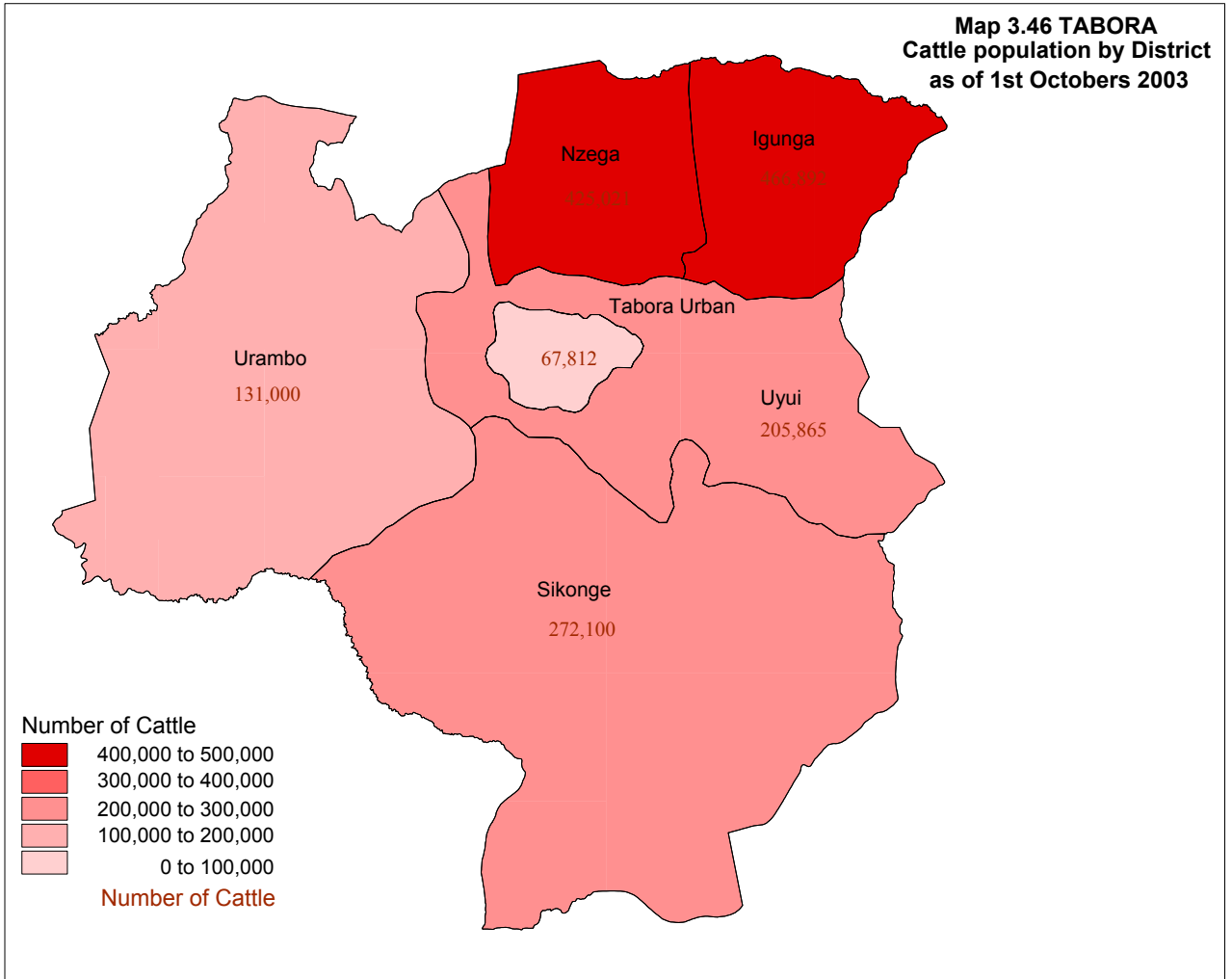
3.12.5.3 Chicken Flock Size

The results indicate that about 74.6 percent of all chicken-rearing households were keeping 1-19 chickens with an average of 8 chickens per holder. About 25.0 percent of holders were reported to be keeping the flock size of 20 to 99 chickens with an average of 31 chickens per holder.

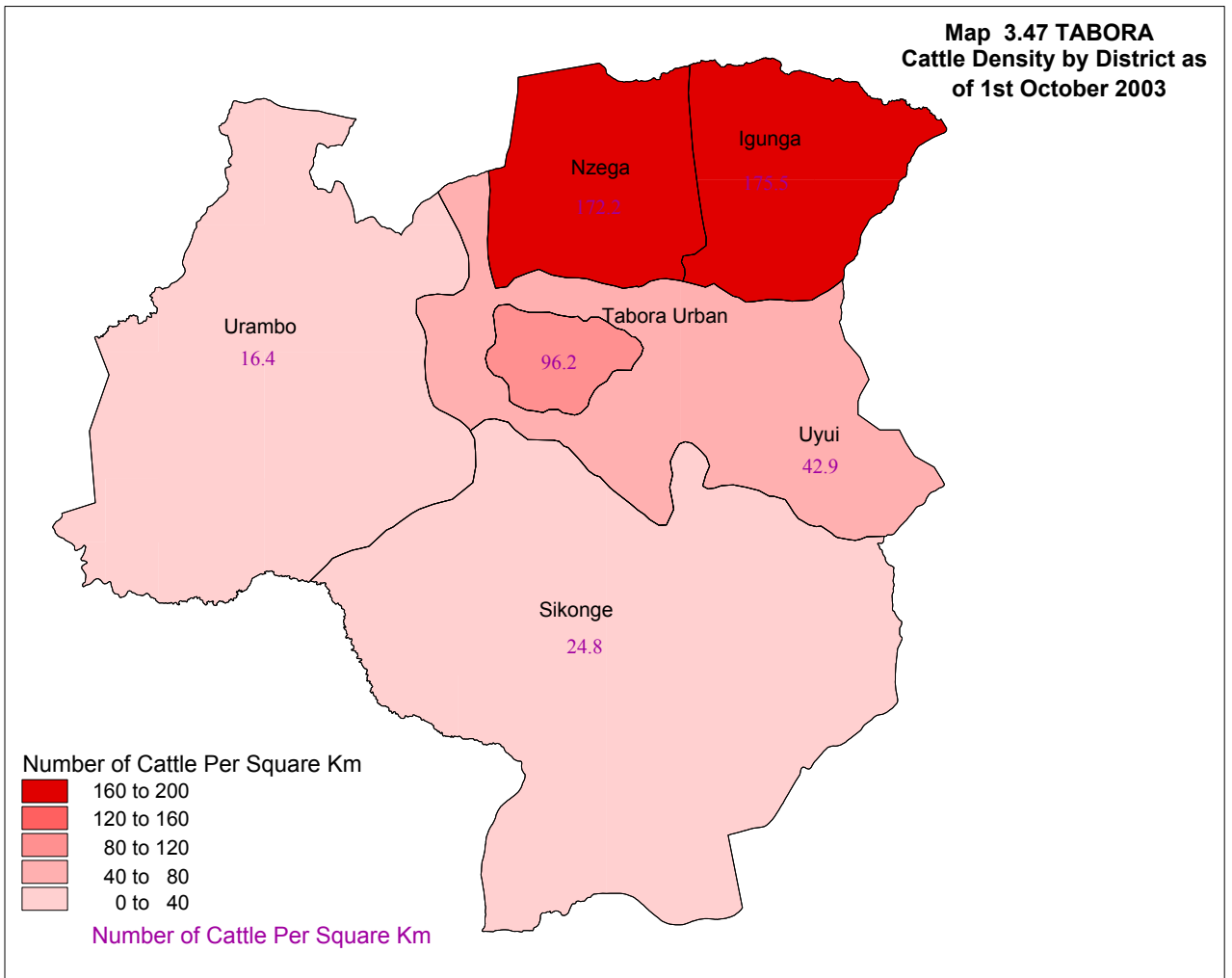
Only 0.3 percent of holders kept the flock sizes of more than 100 chickens at an average of 366 chickens per holder (Table 3.14).

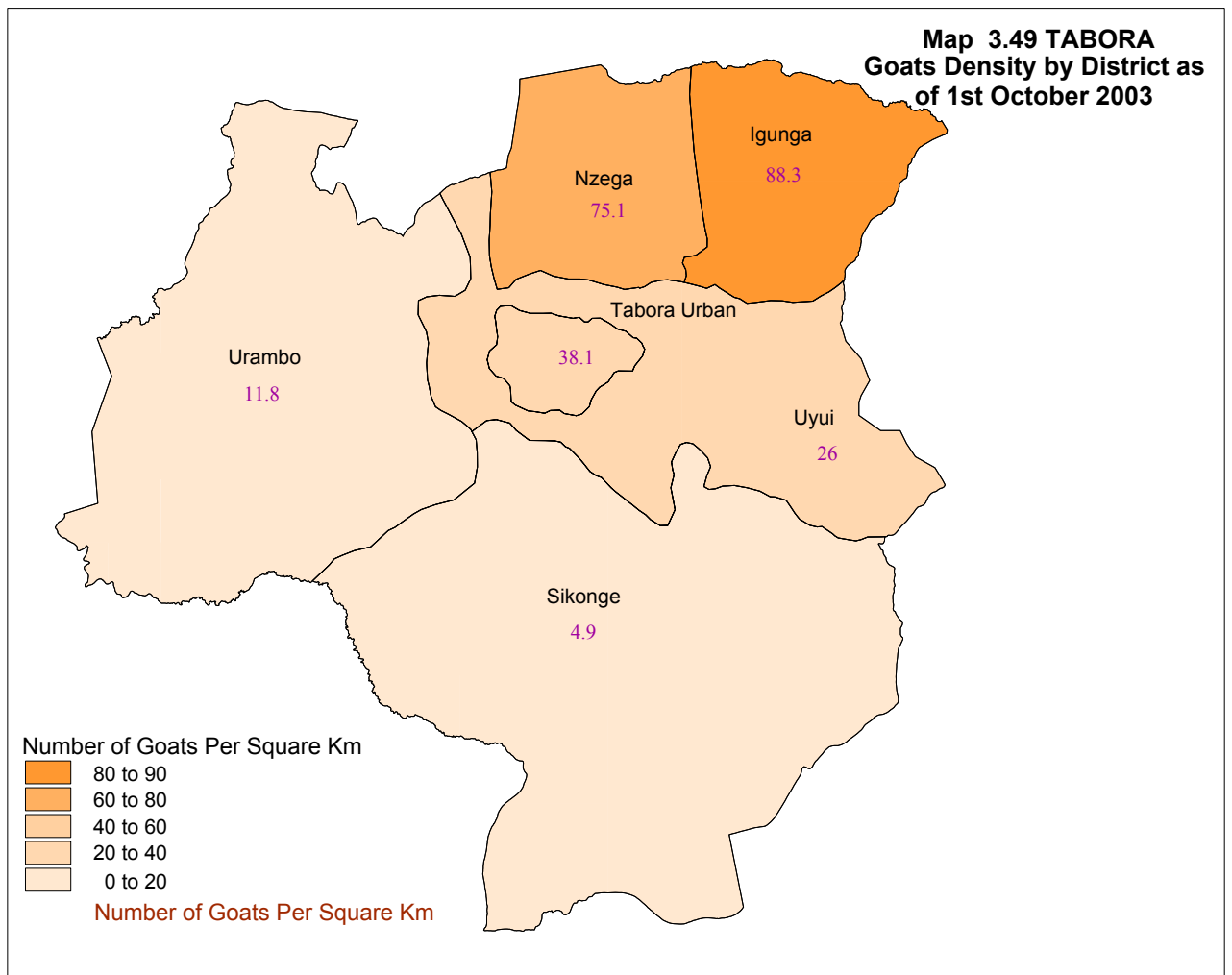
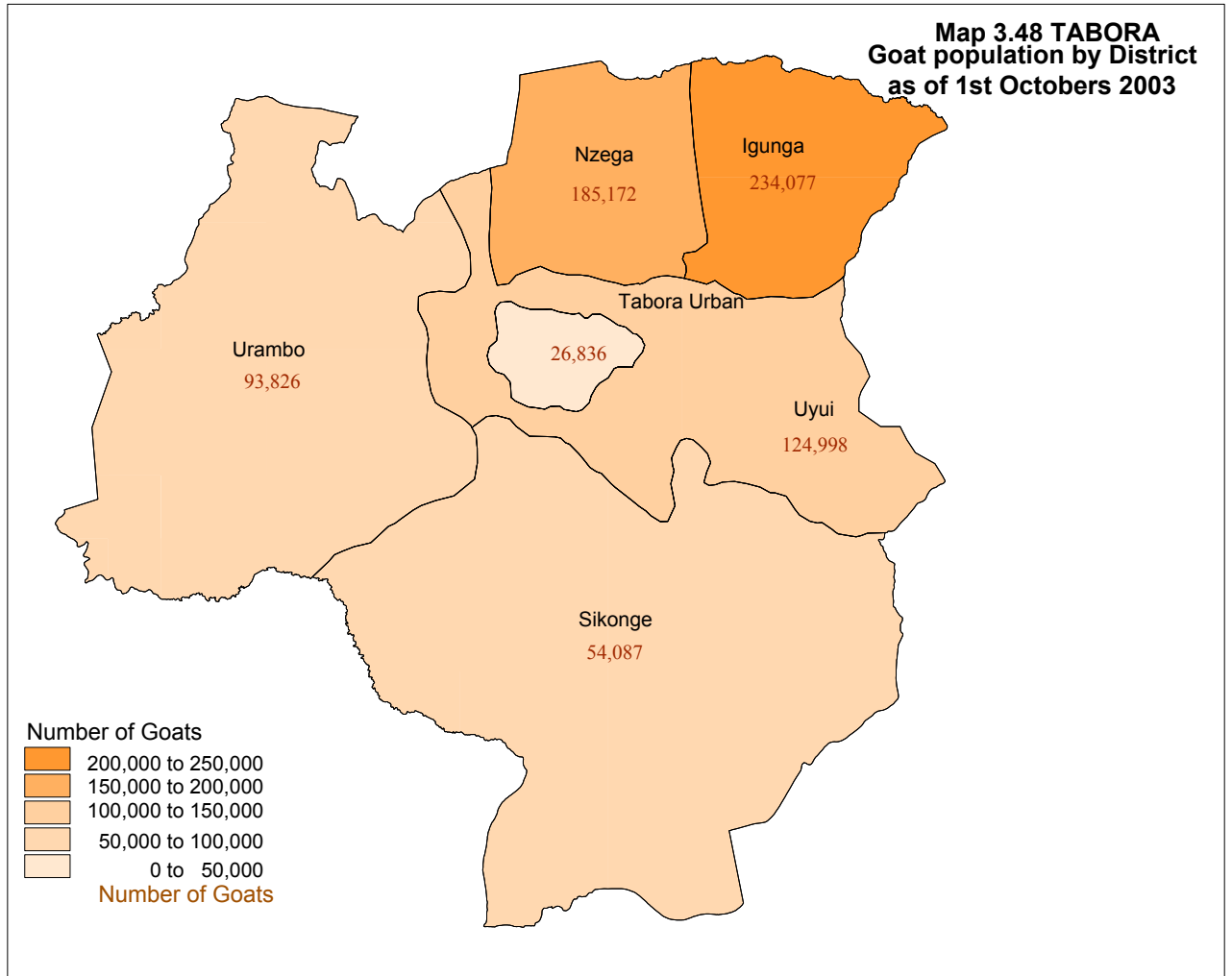
Flock Size	Number of Households	%	Number of Chicken	Average Chicken by Households
1 - 4	28,432	17	83,765	3
5 - 9	46,552	28	309,940	7
10 - 19	50,056	30	645,709	13
20 - 29	23,087	14	517,953	22
30 - 39	9,792	6	312,264	32
40 - 49	4,126	2	173,702	42
50 - 99	4,771	3	289,704	61
100+	477	0	174,432	365
Total	167,294	100	2,507,469	15

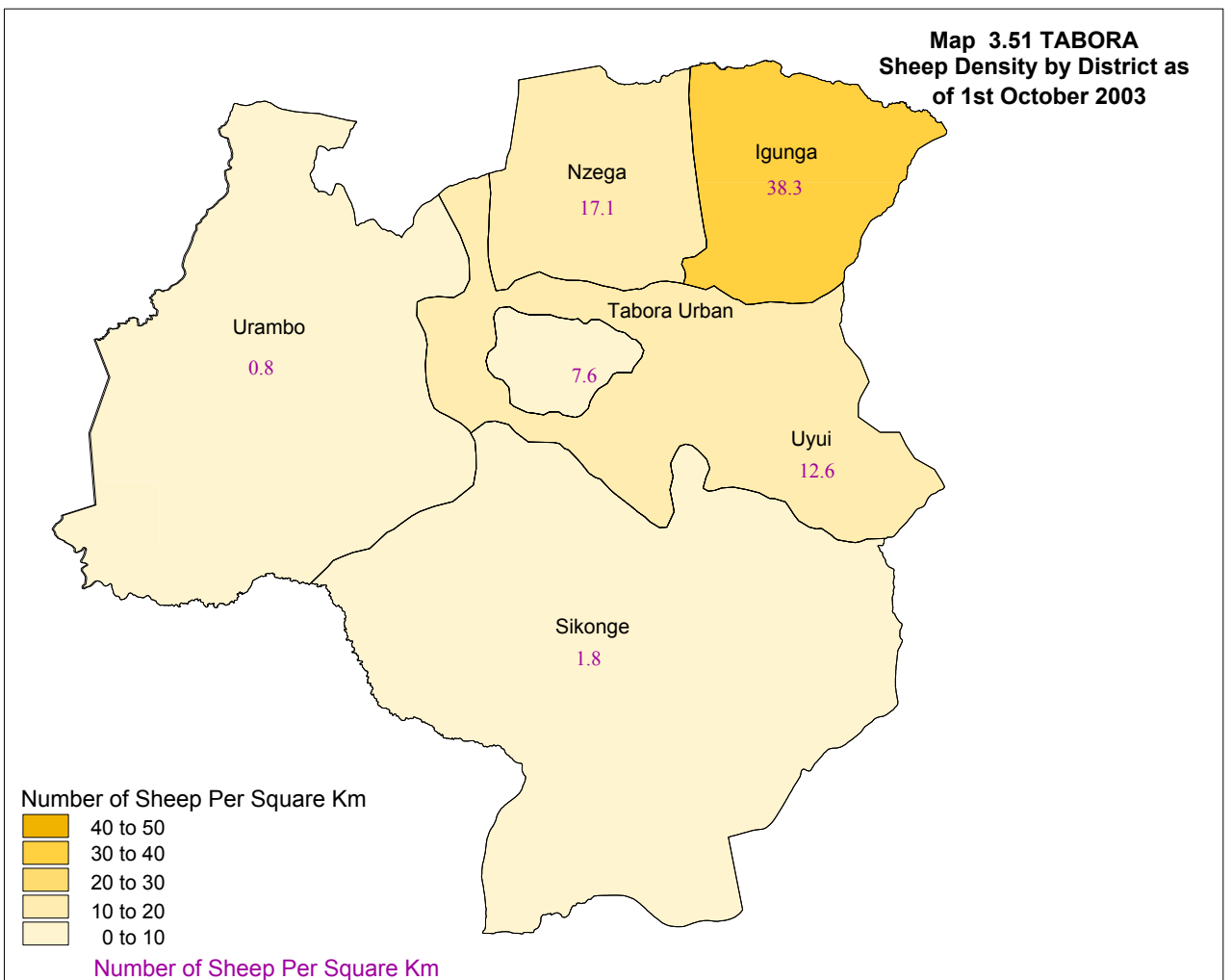
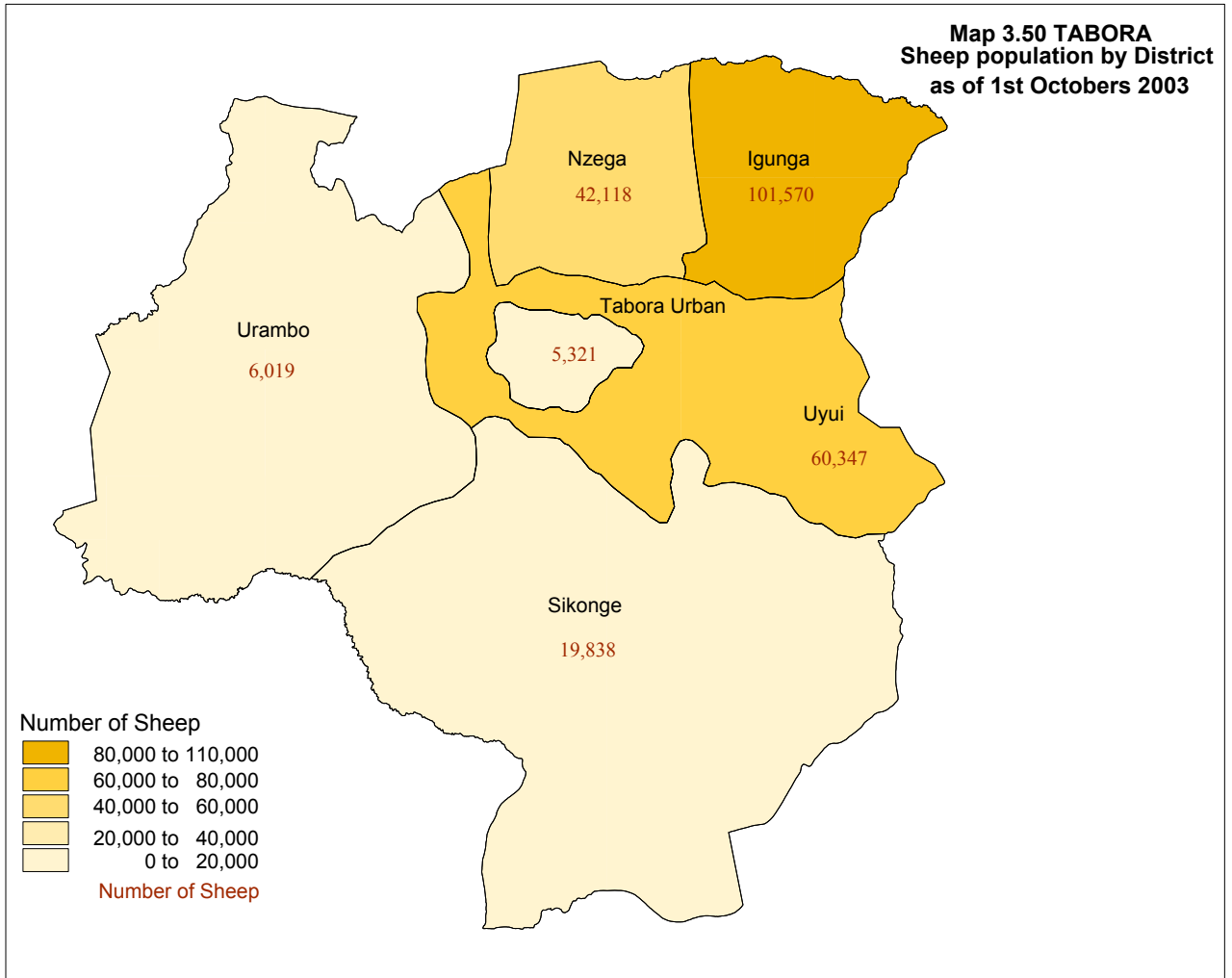
Map 3.46 TABORA
Cattle population by District
as of 1st October 2003

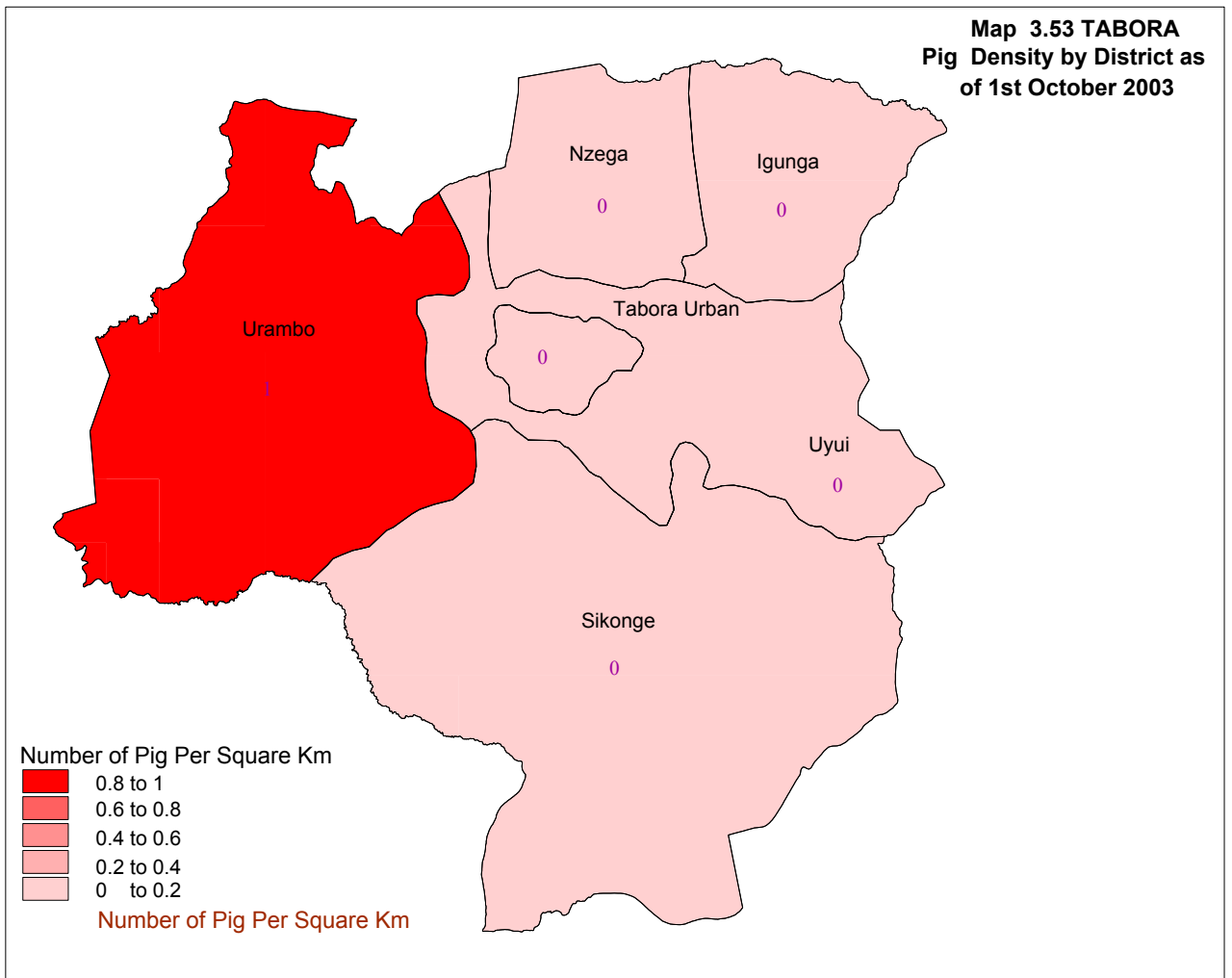
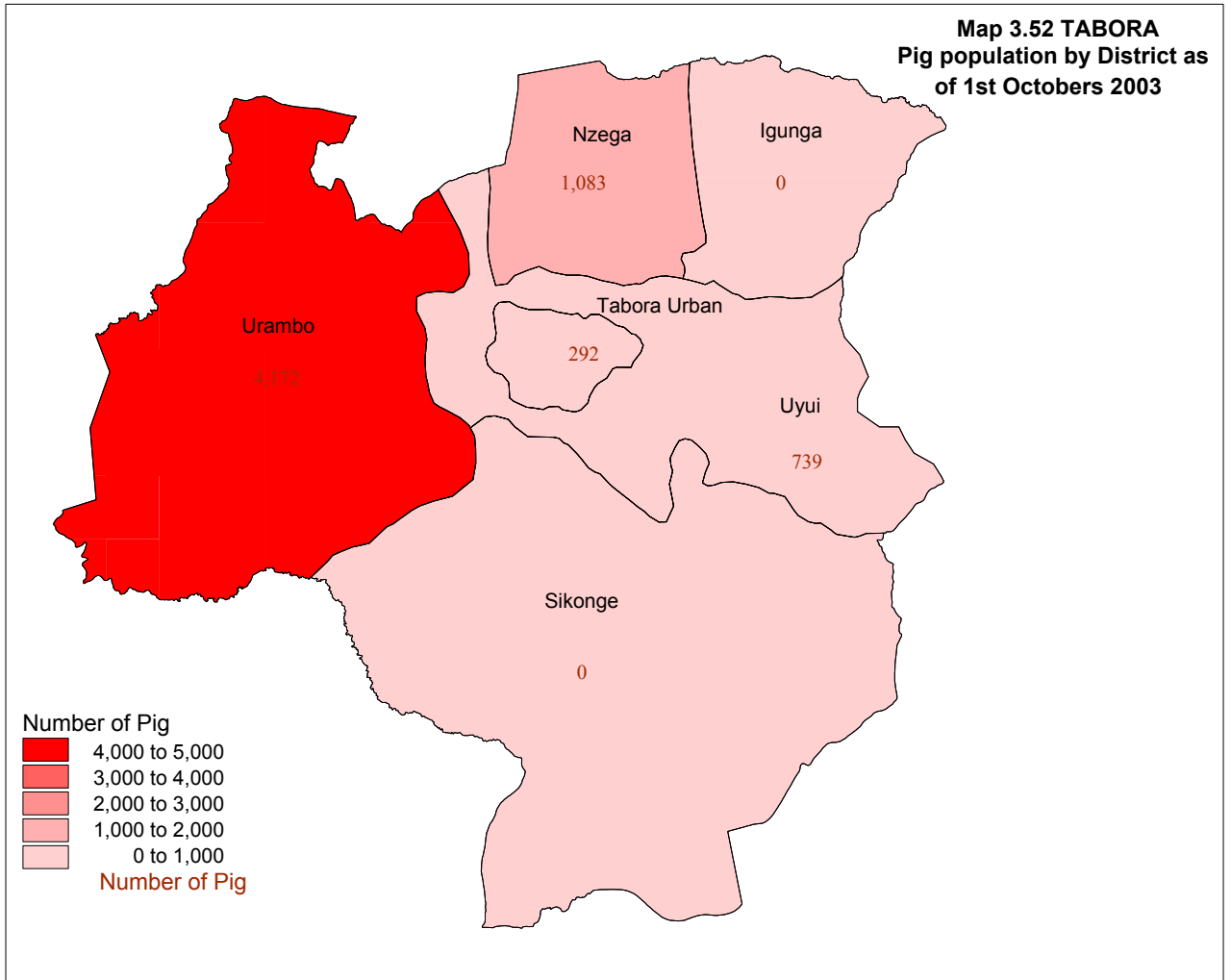


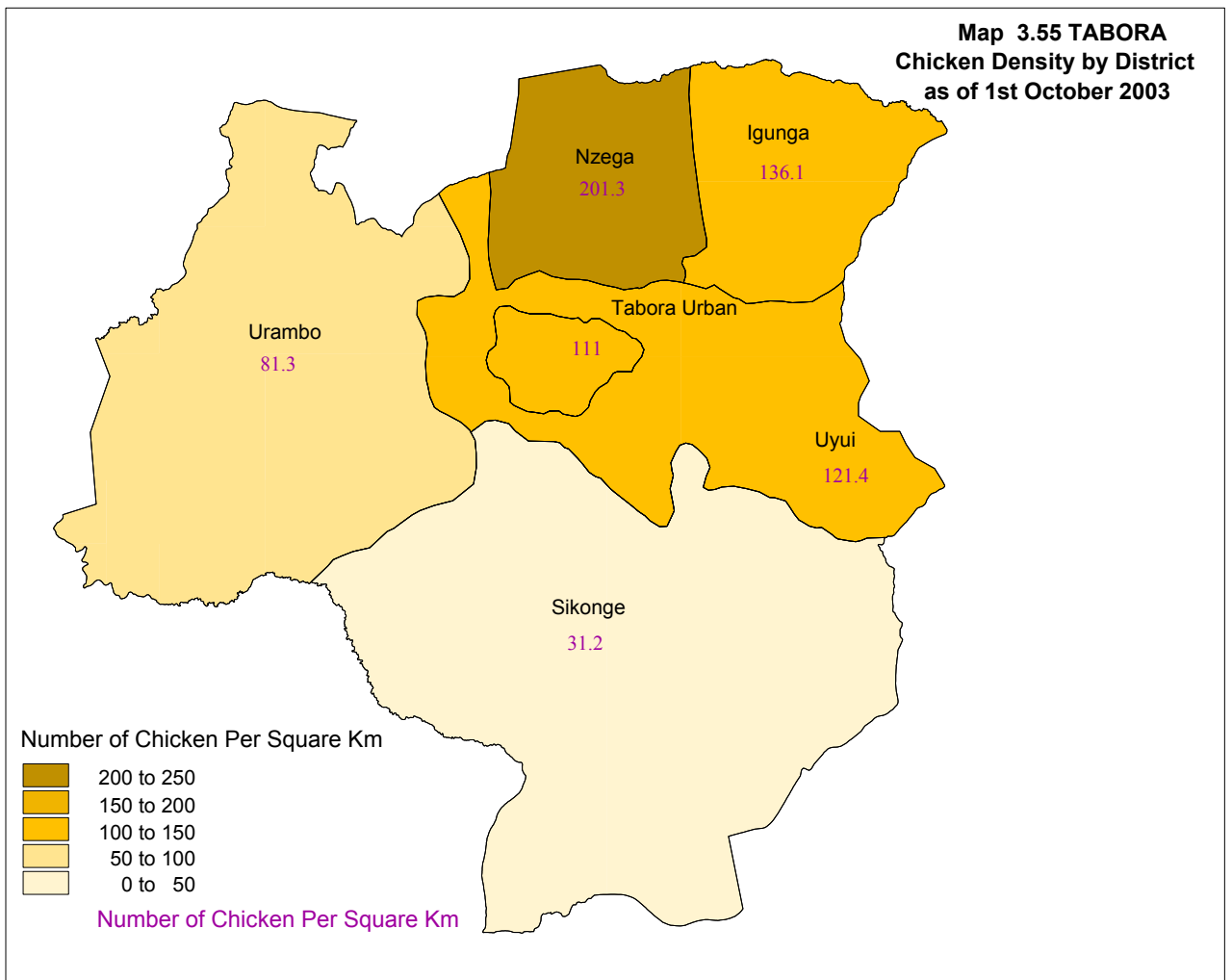
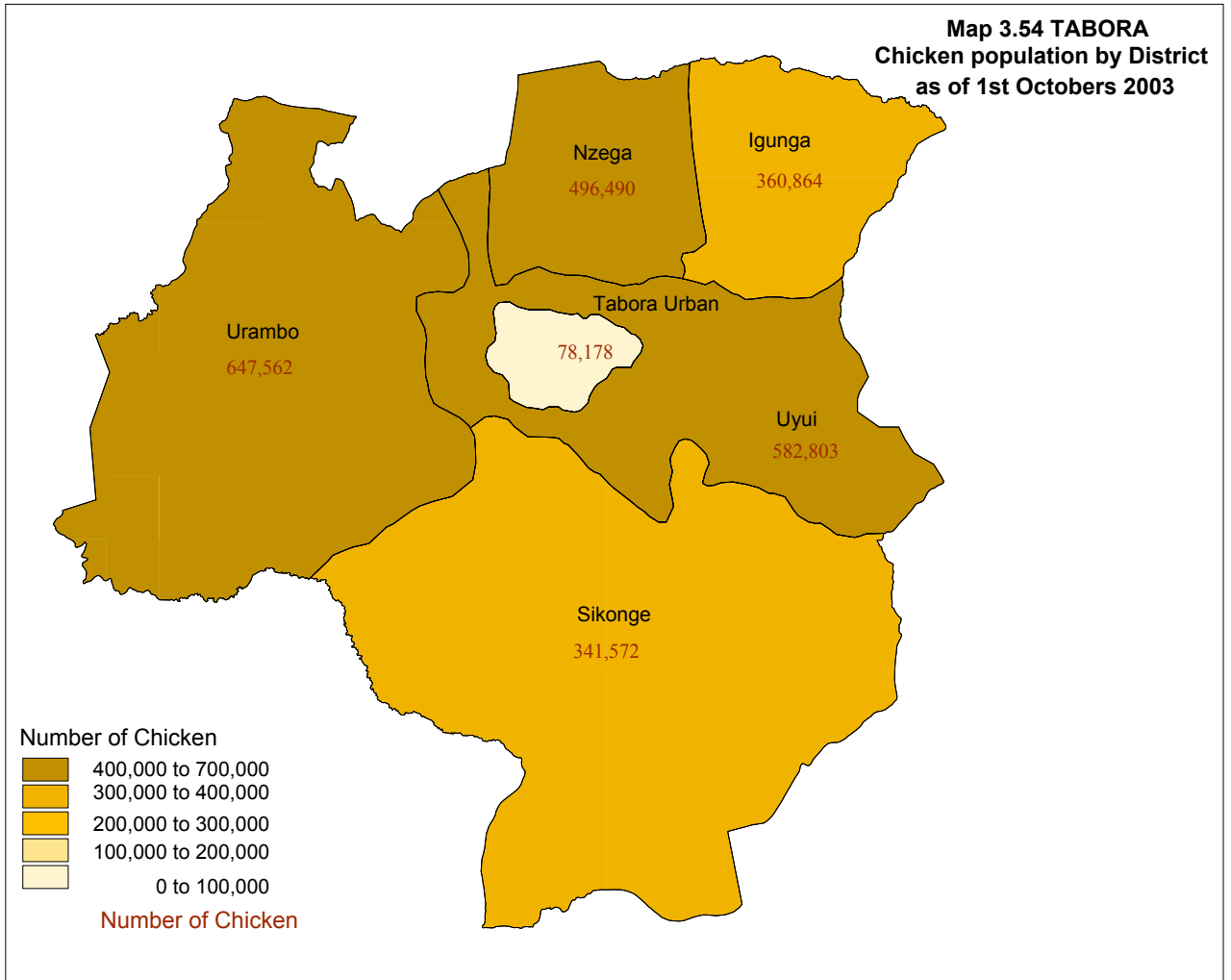
Map 3.47 TABORA
Cattle Density by District as
of 1st October 2003





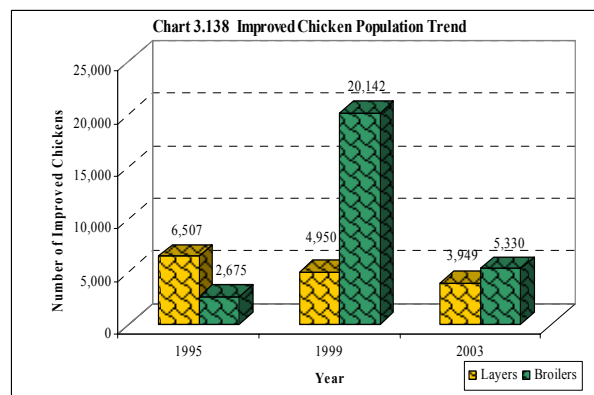
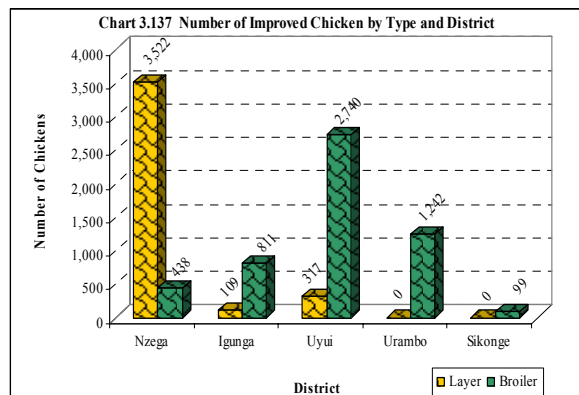






3.12.5.4 Improved Chickens (layers and broilers)

The overall annual growth rate for layers during the eight-year period from 1995 to 2003 decreased at an annual rate of -6.1 percent during which the population decreased from 6,507 to 3,949. For the last four year period layers chicken population decreased at an annual rate of -5.5 percent from 4,950 in 1999 to 3,949 in 2003. The number of improved chicken was most significant in Nzega District followed by Uyui (Chart 3.137).



The overall annual growth rate for broilers during the eight-year period from 1995 to 2003 was 9.0 percent during which the population grew from 2,675 to 5,330. The average annual growth rate was higher (65.7%) during the period of four years from 1995 to 1999. The broiler population exhibited a decreasing trend at the rate of -28.3 percent per annum for the period of four years resulting at decrease from 20,142 in 1999 to 5,330 2003 (Chart 3.138).

3.12.6. Other Livestock

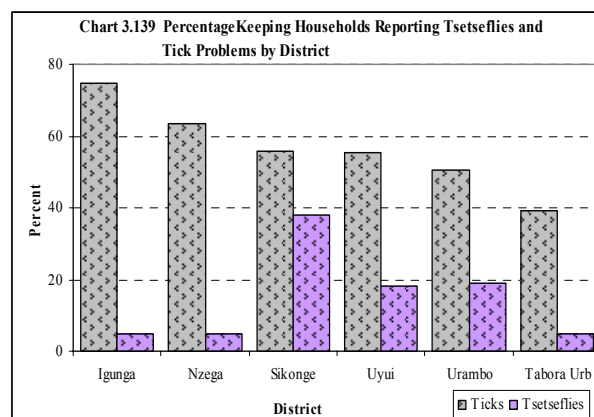
There were 57,565 ducks, 1,830 turkeys, 7,171 rabbits and 26,294 donkeys raised by rural agricultural households in Tabora region. Table 3.15 shows the number of livestock kept in each district. The biggest number of ducks in the region was found in Uyui District (47% of all ducks in the region), followed by Nzega (22%), Urambo (16%), Igunga (9%) and Sikonge (4%). Tabora Urban had the least number of ducks estimated at 2 percent of total ducks in the region. Turkeys were reported in Nzega, Igunga and Sikonge districts only (Table 3.15).

Table 3.15 Number of Other Livestock by Type of Livestock and District

District	Type of Livestock				
	Ducks	Turkeys	Rabbits	Donkeys	Other
Nzega	12,653	890	0	1,197	901
Igunga	5,420	656	0	11,055	341
Uyui	27,042	0	633	13,896	1,019
Urambo	9,171	0	6,438	0	2,552
Sikonge	2,129	285	99	146	0
Tabora Urban	1,151	0	0	0	0
Total	57,565	1,830	7,171	26,294	4,813

3.12.7 Pest and Parasite Incidence and Control

According to the results indicate that 59 percent and 37 percent of the total livestock-keeping households reported to have encountered ticks and tsetse fly problems respectively. Chart 3.139 shows that there was a predominance of tick related diseases over tsetse related diseases. Incidence of ticks' problem was highest in Igunga district whilst the incidence of tsetse flies problem was highest in Sikonge district. The incidences of both problems were lowest in Tabora Urban. (Map 3.56).

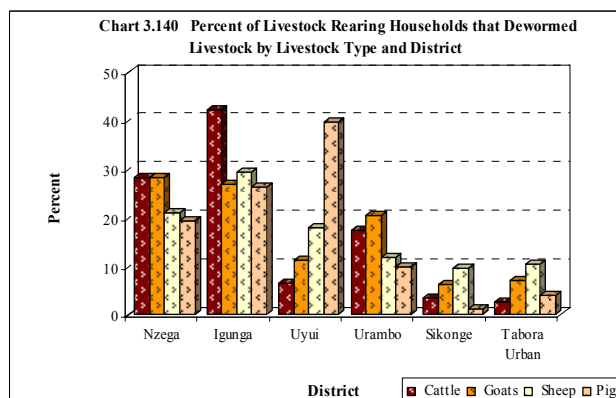


The most practiced method of tick control was spraying with 49 percent of all livestock-rearing households in the region using the method. Other methods used were dipping (10%), smearing (5%) and other traditional methods like hand picking (9%). However, 25 percent of livestock-keeping households did not use any method.

The most common method used to control tsetse flies was spraying which was practiced by 29 percent of livestock-rearing households. This was followed by dipping (6%) trapping (6%) and smearing (3%). However, 41 percent of the livestock rearing households did not use any of the three aforementioned methods.

3.12.7.1 Deworming

Livestock rearing households that dewormed their animals were 30,028 (34% of the total livestock rearing households in the region). The percentage of the households that dewormed cattle was 34, goats (17%) and sheep (15%) (Chart 3.140).

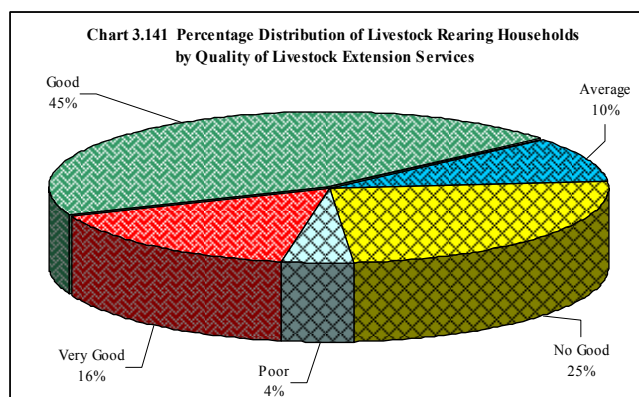


3.12.8. Access to Livestock Services

3.12.8.1 Access to Livestock Extension Services

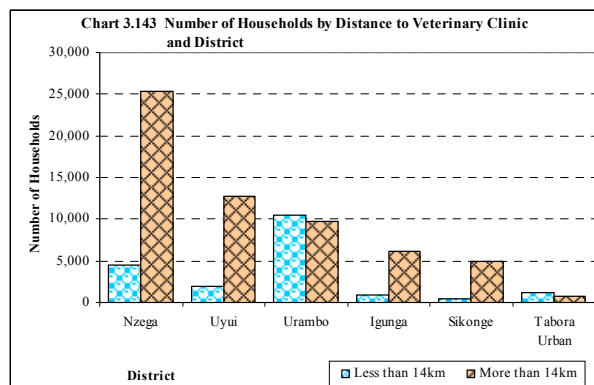
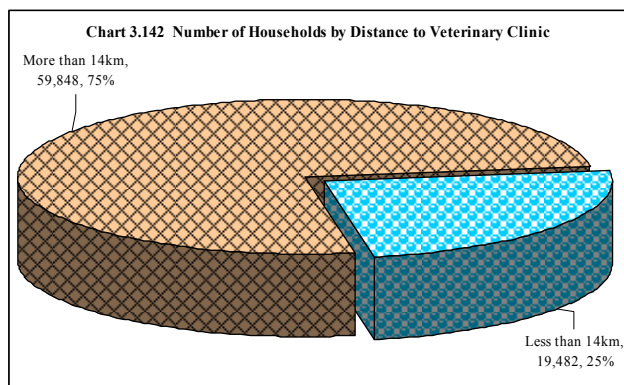
The total number of households that received livestock advice was 16,853, representing 19.2 percent of the total livestock-rearing households and 7.1 percent of the agricultural households in the region. The main livestock extension agent was the government which provided service to about 83.8 percent of all households receiving livestock extension services followed by co-operatives (11.1%). The rest of the households got services from NGOs/development projects (4.1%) and large-scale farmers (0.5%).

About 45 percent of livestock rearing households described the general quality of livestock extension services as being good, 10 percent said they were average and 16 percent said they were very good. However, 25 percent of the livestock rearing households said the quality was not good whilst 4 percent described them as poor (Chart 3.141).



3.12.8.2 Access to Veterinary Clinic

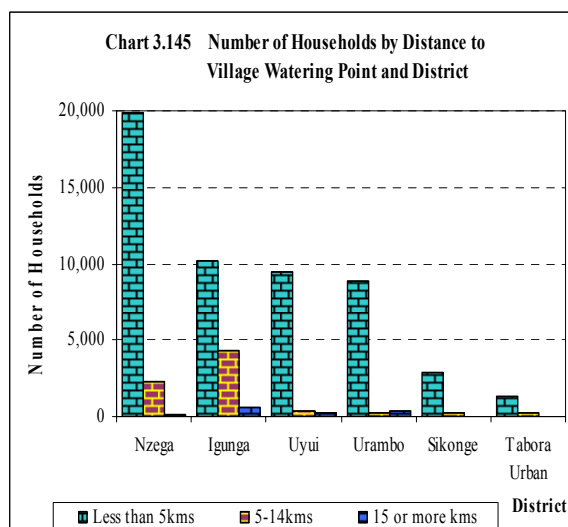
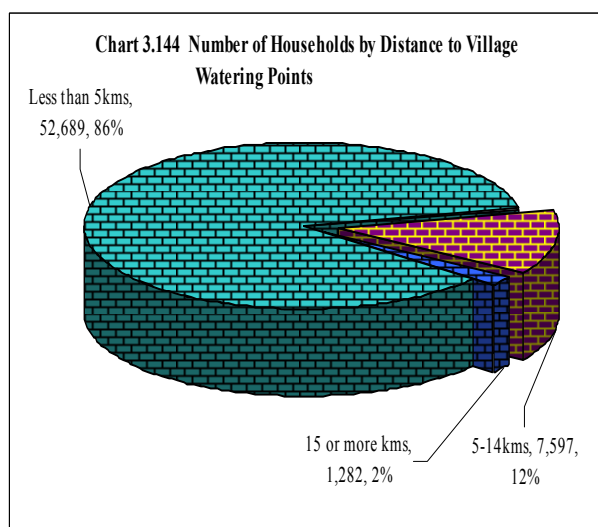
Many veterinary clinics were located very far from livestock rearing households. About 75 percent of the livestock rearing households accessed the services, at a distance of more than 14 km. Only 25 percent of them accessed the services within 14 km from their dwellings (Chart 3.142). The most affected district was Sikonge district with 91 percent of all livestock rearing households accessing the services at a distance of more than 14 km. Tabora Urban was the least affected because about 60 percent of the households could access the service within a distance of 14 kilometers. (Chart 3.143).



3.12.8.3 Access to Village Watering Points/dam

The number of livestock rearing households residing less than 5 km from the nearest watering point was 52,689 (86% of livestock rearing households in Tabora region) whilst 7,597 households (12%) resided between 5 and 14 km. However, 1,282 households (2%) had to travel a distance of 15 or more km to f the nearest watering point (Chart 3.144).

Uyuui district had the best livestock water supply with the majority of livestock rearing households residing within 5 km from the nearest watering point. This is followed by Urambo, Sikonge, Nzega and Tabora Urban districts. In Igunga district about 32 percent of the livestock rearing households had to travel a distance of more than five kilometers to the nearest watering point (Chart 3.145)

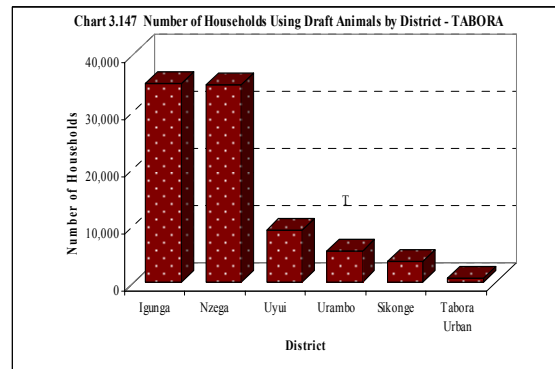
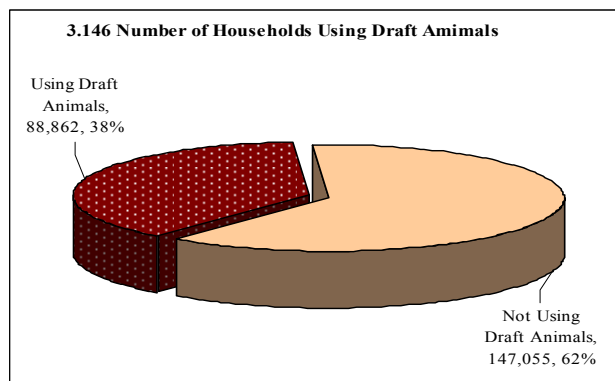


3.12.9. Animal Contribution to Crop Production

3.12.9.1 Use of Draft Power

Use of draft animals to cultivate land in Tabora region is limited in some districts while it is common in other districts. Draft animals were used by 88,862 households (38% of the total agricultural households in the region) (Chart 3.146).

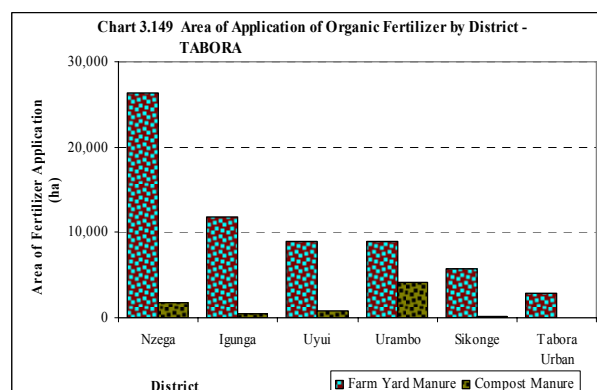
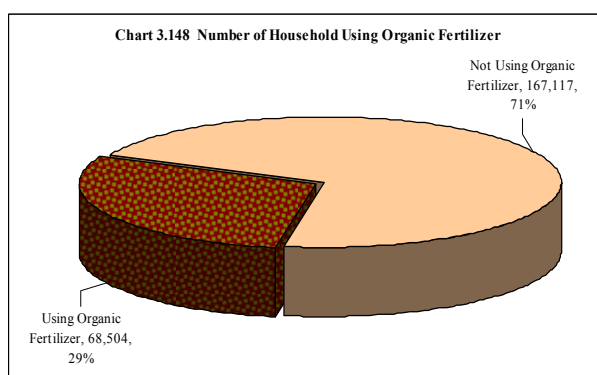
The number of households that used draft animals in Igunga was 34,913 representing 39.3 percent of the households using draft animals in the region followed by Nzega (34,629 households, 39.0%), Uyui (9,192 households, 10.3%), Urambo (5,525 households, 6.2%) and Sikonge (3,754 households, 4.2%). In Tabora Urban only 849 households (1%) used draft animals. (Chart 3.147 and Map 3.57).



The region had 370,495 oxen (162,466 oxen in Igunga, 120,742 oxen in Nzega, 42,341 oxen in Uyui, 25,202 oxen in Urambo, 15,992 oxen in Sikonge and 3,752 oxen in Tabora Urban) that were used to cultivate 223,878 hectares of land. This represents 8.8 percent of the total oxen found on the Mainland. The largest area cultivated using oxen was found in Igunga district (162,466 ha, 44% of the total area cultivated using oxen).

3.12.9.2 Use of Farm Yard Manure

The number of Households using organic fertilizer in Tabora region was 68,504 (29% of total crop growing households in the region) (Chart 3.148). The total area applied with organic fertilizer was 176,963 ha of which 159,104 hectares (90% of the total area applied with organic fertilizer or 29.9% of the area planted with annual crops and vegetables in Tabora region during the long rainy season) was applied with farm yard manure. The largest area applied with farm yard manure was found in Nzega district with 26,328 hectares (40.9% of the total area applied with farm yard manure) followed by Igunga (11,737 ha, 18.2%), Urambo (8,972 ha, 13.9%), Uyui (8,880 ha, 13.8%), Sikonge (5,695 ha, 8.8%) and Tabora Urban (2,803 ha, 4.4%) (Chart 3.149 and Map 3.58).



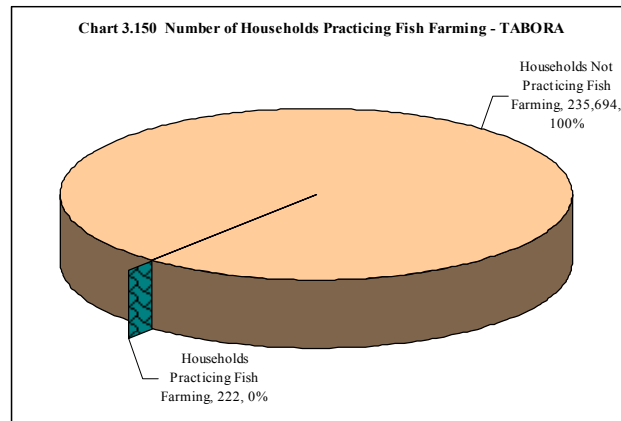
3.12.9.4 Use of Compost

Only 7,230 ha (10.% of the area of organic fertilizer application) was applied with compost. The largest area applied with compost manure was found in Urambo district with 4,104 hectares (56.8% of the total area applied with compost manure) followed by Nzega (1,713 ha, 23.7%), Uyui (732 ha, 10.1%), Igunga (537 ha, 7.4%), Sikonge (84 ha, 1.2%) and Tabora Urban (60 ha, 0.8%) (Chart 3.149 and Map 3.59).

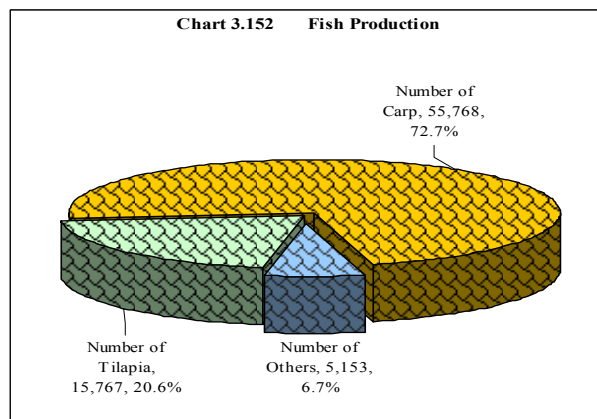
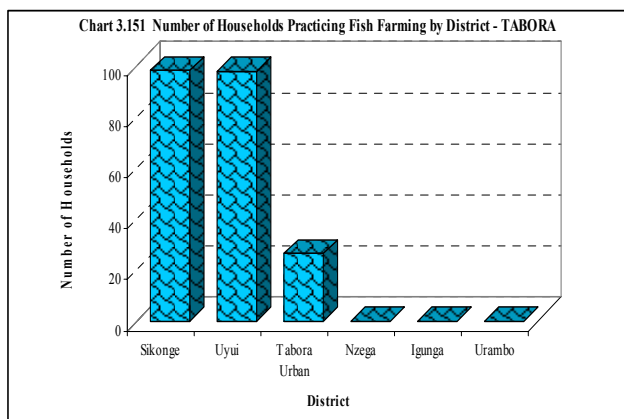
3.12.10 Fish Farming

The number of households involved in fish farming in Tabora region was 222, representing 0.1 percent of the total agricultural households in the region (Chart 3.150 and Map 3.60).

Sikonge and Uyui districts were the leading districts each with 98 households involved in fish farming. This was followed by Tabora Urban (26 households). Fish farming was not practiced in Nzega, Igunga and Urambo districts (Chart 3.151).



The main source of fingerings was the neighbours which provided fingerings to 49 percent of the fish farming households. About 38 percent of households practicing fish farming got fingerings from the government and 12 percent got them from non-governmental organizations and projects.



All fish farming households in the region used the dug-out-pond system and the main fish specie planted was Carp. The number of fish harvested in Tabora region was 76,689, of which 55,768 fish (73%) were carp and 15,767 (21%) were tilapia whilst 5,153(7%) were other types (Chart 3.152) . All households (100%) did not sell fish.

3.13. POVERTY INDICATORS

The agricultural census collected data on poverty for the purpose of providing a base for tracking progress in poverty reduction strategies undertaken by the government.

3.13.1 Access to Infrastructure and Other Services

The results indicate that among the evaluated services, the regional capital was a service located very far from most of the household's dwellings than any other service. It was located at an average distance of 113 kilometers from the agricultural household's dwellings. Other services and their respective average distances in kilometers from the dwellings were tarmac road (88), hospital (44), tertiary market (43), secondary school (27), all weather road (14), primary market (12), health clinic (10), primary school (4) and feeder road (3) (Table 3.17).

Table 3.16: Mean Distances from Household Dwellings to Infrastructures and Services by District

District	Mean Distance to											
	Secondary Schools	Primary Schools	All weather roads	Feeder Roads	Hospitals	Health Clinics	District Capital	Regional Capital	Primary Markets	Secondary Market	Tertiary Market	Tarmac Roads
Nzega	19.4	2.7	6.7	3.2	31.4	9.8	41.9	105.8	8.5	15.9	26.6	69.2
Igunga	13.6	2.4	9.1	2.1	25.2	6.4	46.3	163.9	7.0	14.9	27.0	107.1
Uyui	43.7	5.8	11.8	4.5	61.1	18.1	70.5	68.5	13.1	32.4	64.4	68.6
Urambo	22.4	5.7	19.0	3.2	58.4	8.9	63.5	125.8	13.3	19.4	48.3	115.8
Sikonge	67.3	3.5	47.1	2.0	67.0	7.8	76.8	133.4	28.6	25.8	86.0	119.4
Tabora Urban	14.6	4.1	3.8	0.8	13.5	8.2	14.0	14.5	9.4	13.3	13.9	5.0
Total	27.0	4.0	14.1	3.0	43.8	10.1	54.4	113.3	11.8	20.1	42.6	88.4

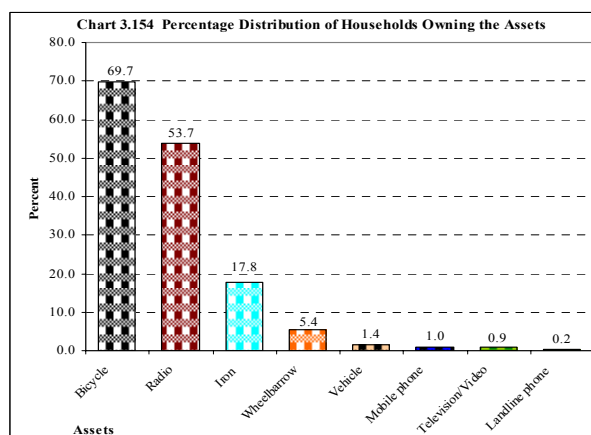
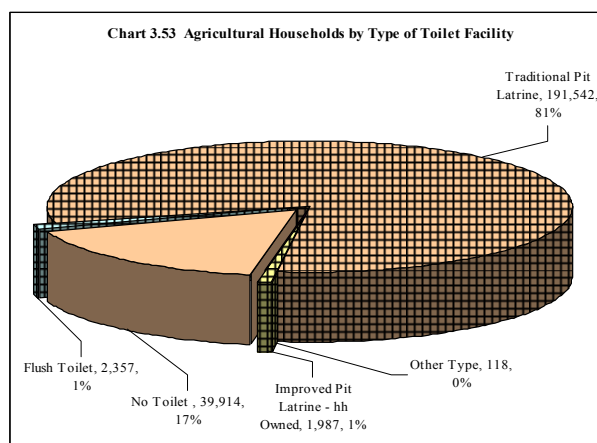
3.13.2 Type of Toilets

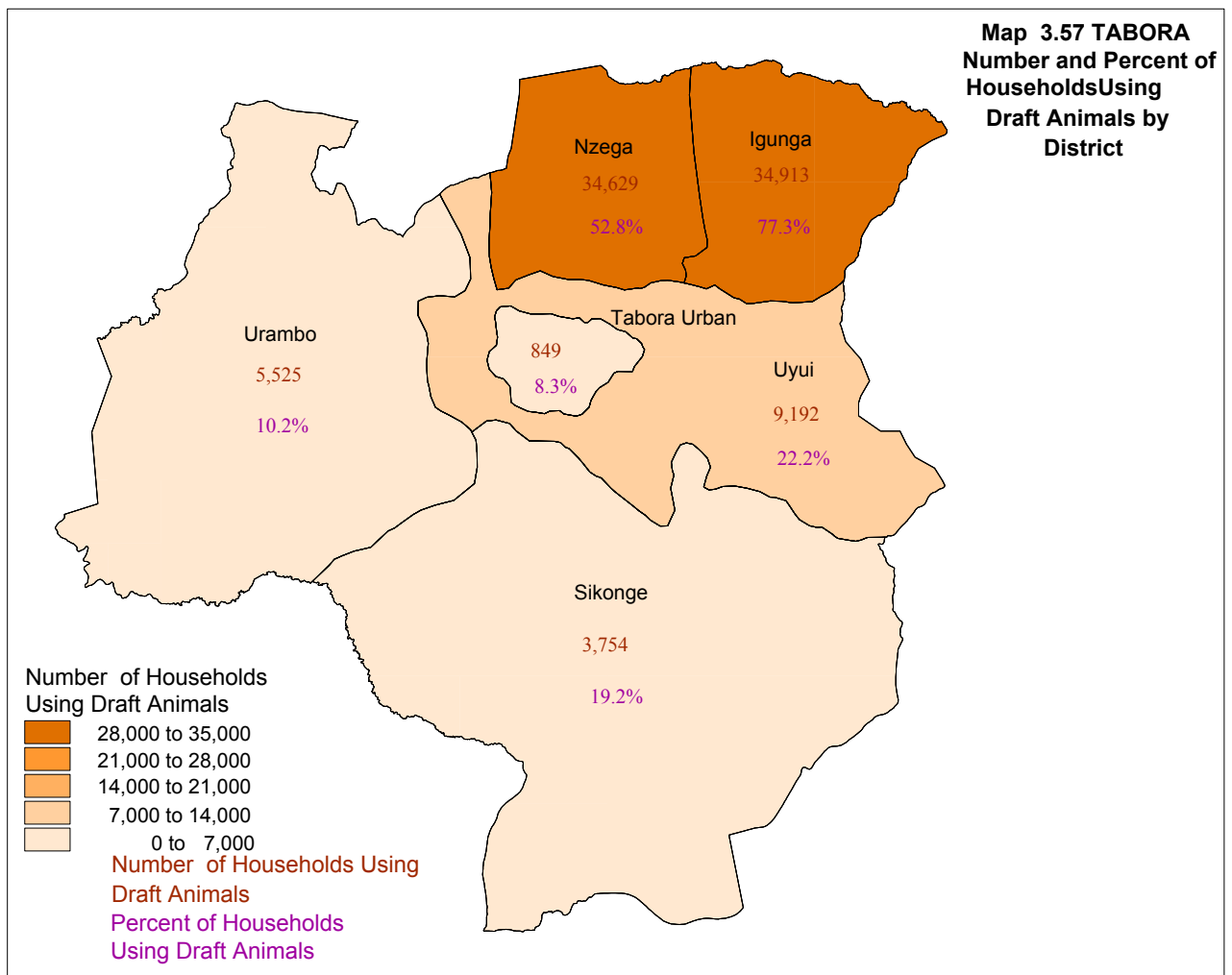
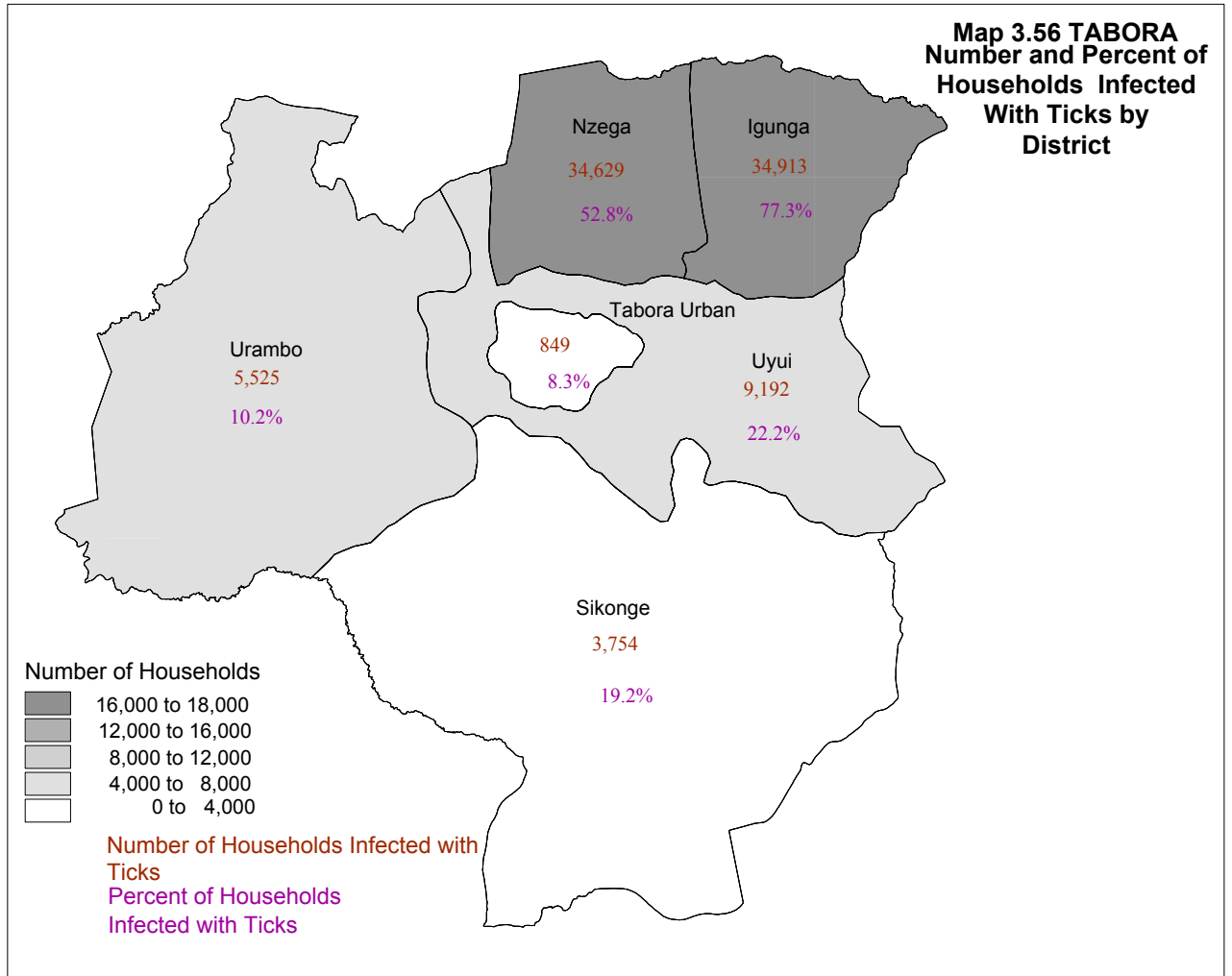
A large number of rural agricultural households use traditional pit latrines (191,542 households, 81.2% of all rural agricultural households) 1,987 households (0.8%) use improved pit latrine and 2,357 households (1.0%) use flush toilets. The remaining 118 household (0.0%) use other toilets facilities. However, 39,914 households (16.9%) in the region had no toilet facilities (Chart 3.153).

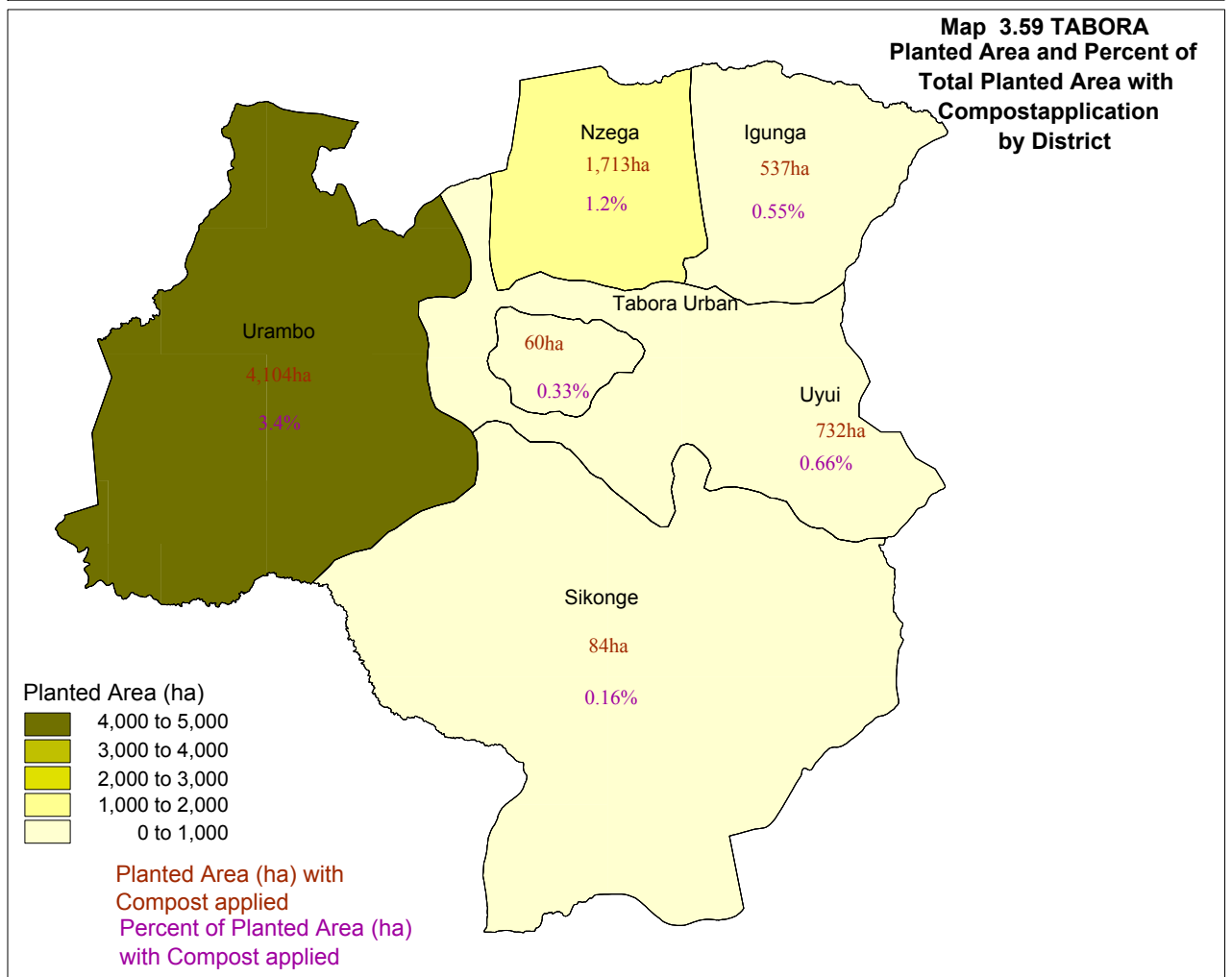
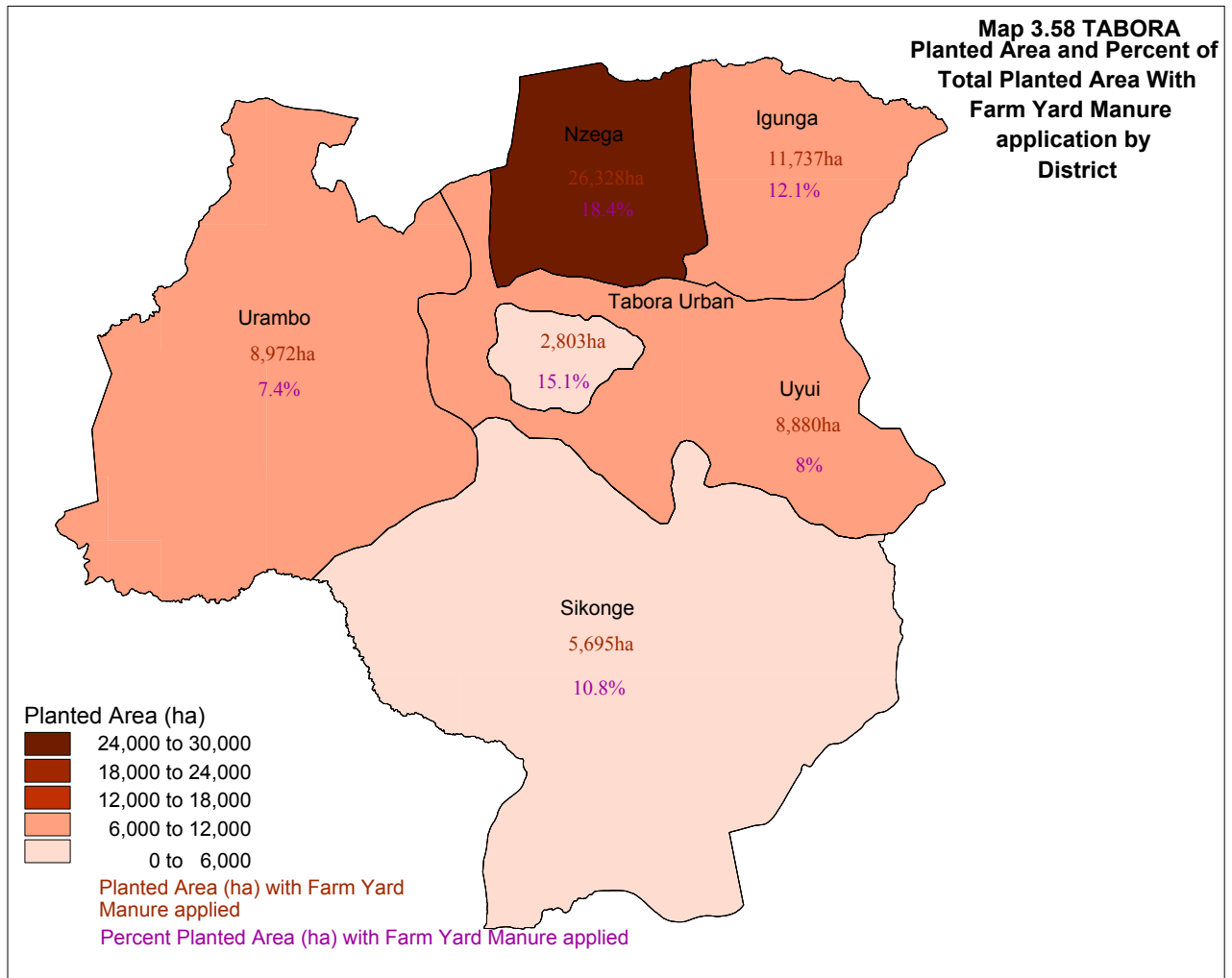
The distribution of the households without toilets within the region indicates that 32.8 percent of them were found in Nzega District and 0.6 percent was from Tabora Urban. The percentages of households without toilets in other districts were as follows Igunga (27.1%), Uyui (14.4%), Urambo (14.1%), and Sikonge (11.0%) Map 3.61).

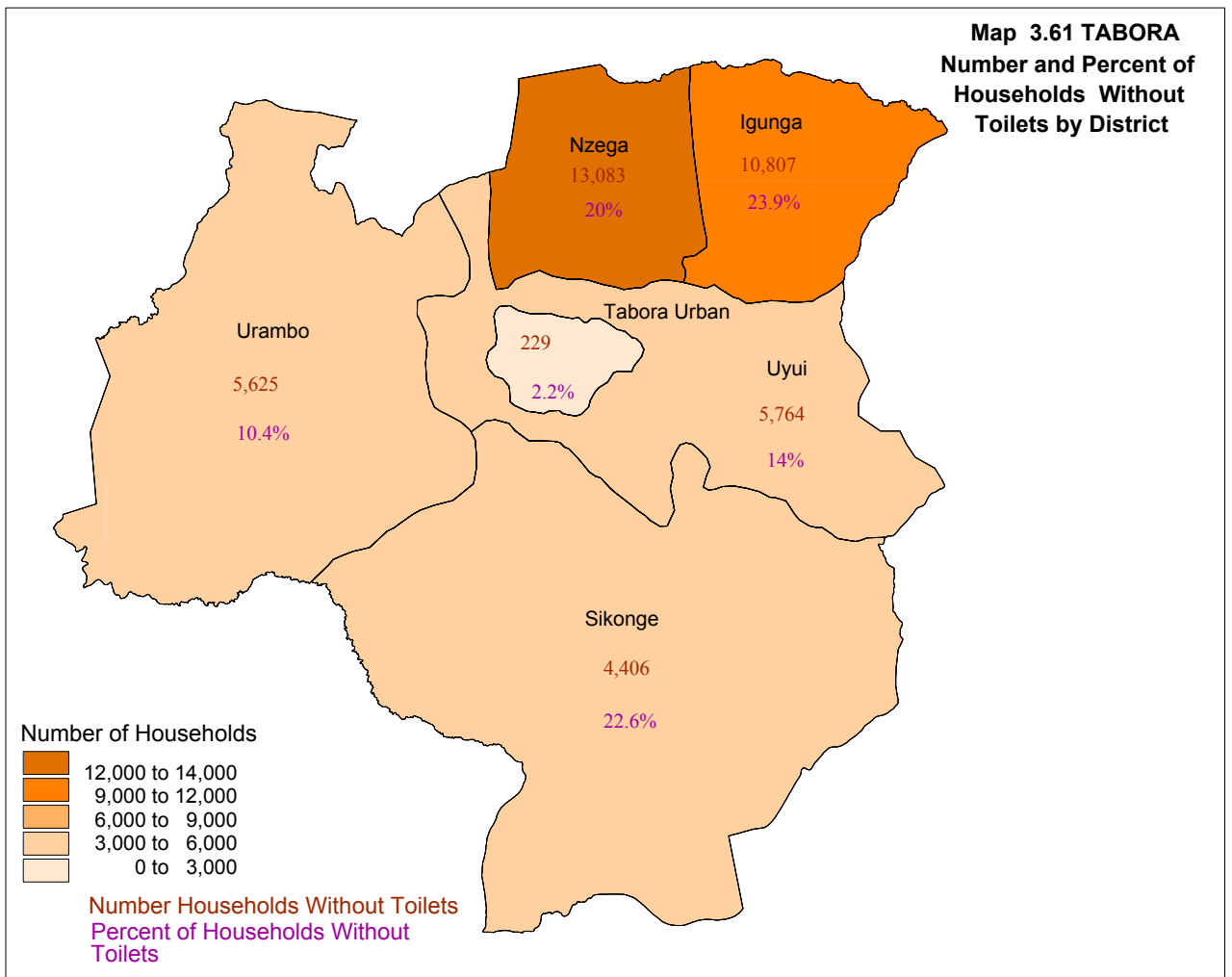
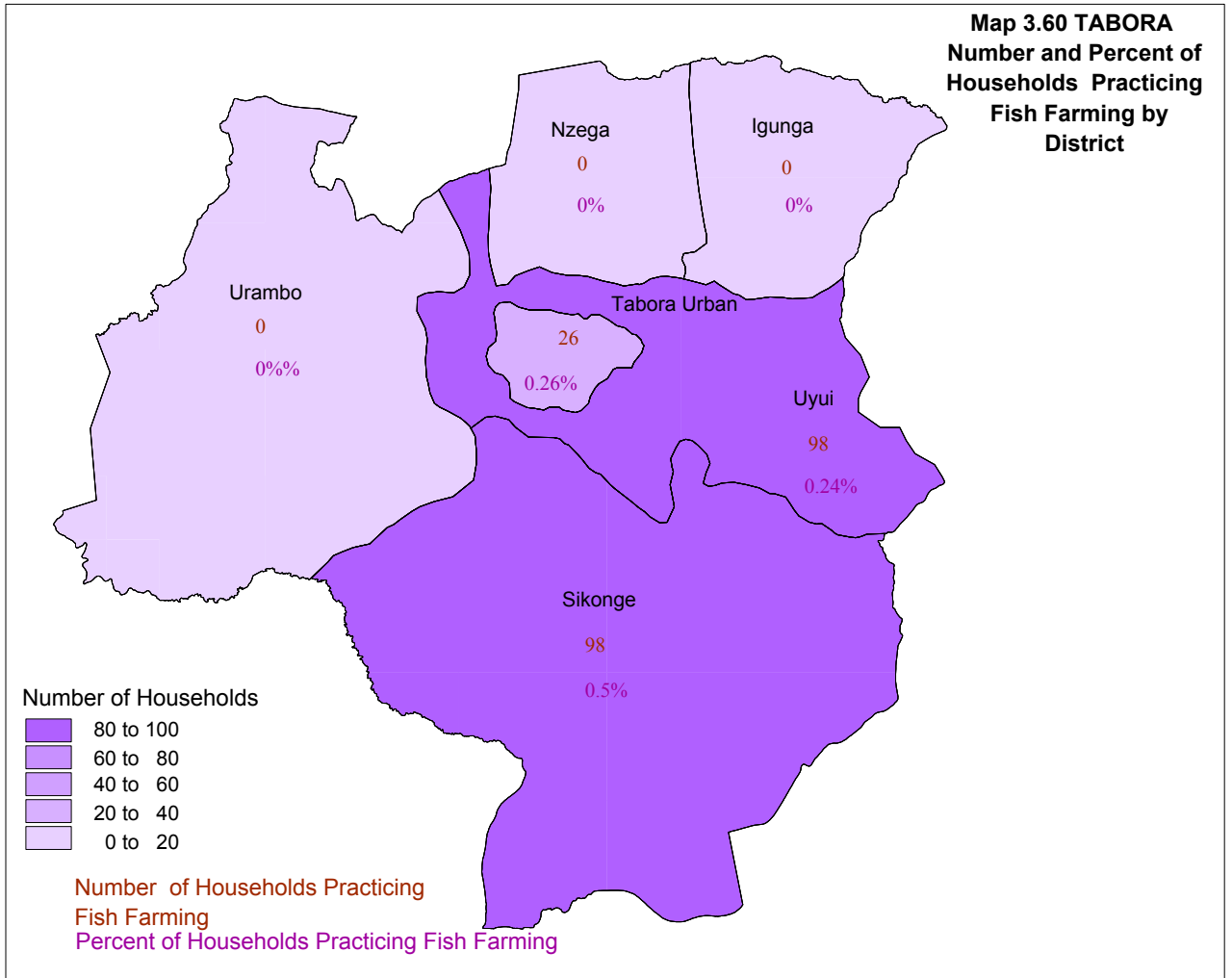
3.13.3 Household's Assets

Bicycles are owned by most rural agricultural households in Tabora region with 164,536 households (69.7% of the agriculture households in the region) owning the asset followed by radio (126,723 households, 53.7%), iron (42,071 households, 17.8%), wheelbarrow (12,671 households, 5.4%), vehicles (3,214 households, 1.4%), mobile phone (2,336 households, 1.0%), television/video (2,127 households, 0.9%) and landline phone (368 households, 0.2%) (Chart 3.154).



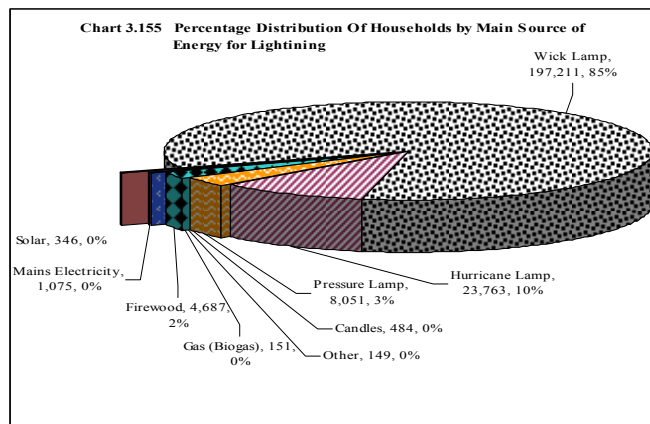






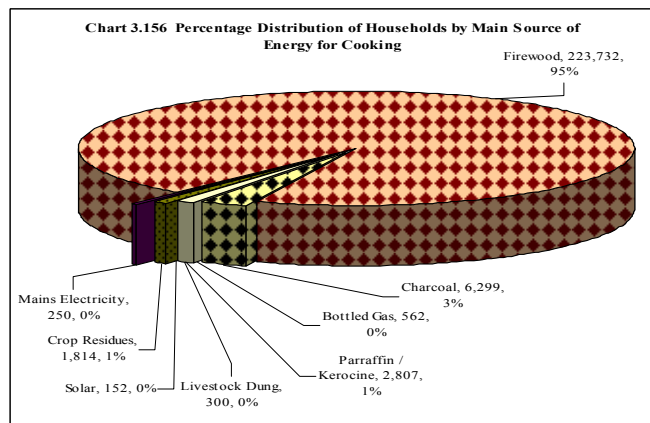
3.13.4 Sources of Lighting Energy

Wick lamp was the most common source of lighting energy in the region. with 83.6 percent of the total rural households using this source of energy followed by hurricane lamp (10.1%), pressure lamp (3.4%), fire wood (2.0%), mains electricity (0.5%), candles (0.2%), solar and gas or biogas (0.1% each). Other source of lighting energy accounted for 0.1 percent (Chart 3.155).



3.13.5 Sources of Energy for Cooking

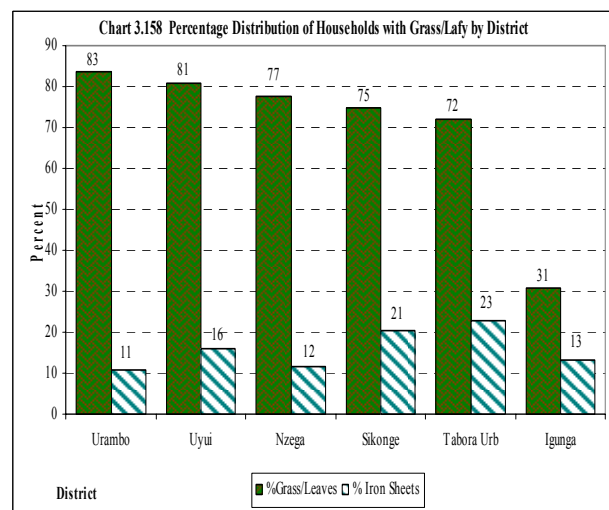
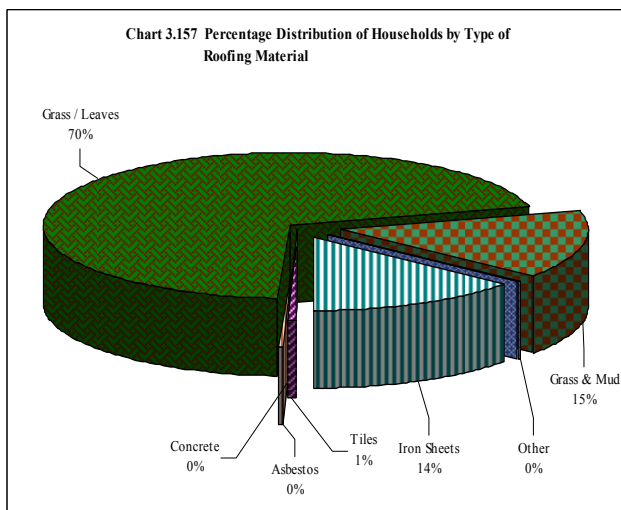
The most prevalent source of energy for cooking was firewood, which was used by 94.84 percent of all rural agricultural households in Tabora region. This is followed by charcoal (2.67%). The rest of energy sources accounted for 2.49 percent. These were paraffin/kerosene (1.19%), crop residue (0.77%), bottled gas (0.24%), livestock dung (0.13%), mains electricity (0.11%) and solar (0.06%) (Chart 3.156).



3.13.6 Roofing Materials

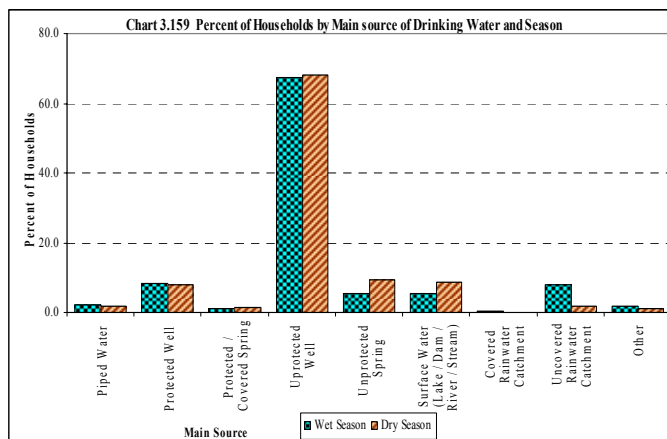
The most common material used for roofing of the main dwelling was grass and/or leaves and it was used by 70.1 percent of the rural agricultural households. This was followed by grass and mud (14.9%) which was closely followed by iron sheets (13.8%), tiles (0.6%), asbestos (0.3%) concrete (0.1%) and others (0.3%) (Chart 3.157).

Urambo district had the highest percentage of households with grass/leaves roofing material (83%) and was followed by Uyui district.(81%), Nzega (77%), Sikonge (75%), Tabora Urban (72%) and Igunga (31%) (Chart 3.158 and Map 3.62).

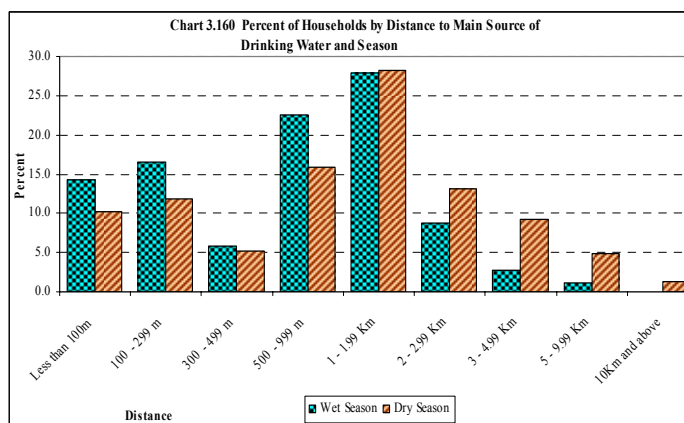


3.13.7 Access to Drinking Water

The main source of drinking water for rural agricultural households in Tabora region was unprotected wells (67.5 percent of households use unprotected wells during the wet season and 68.2 percent of the households during the dry seasons). This was followed by protected wells (8.2 % of households during wet season and 7.8 % in dry season), unprotected springs (5.3% of households during the wet season and 9.3% in the dry season), surface water (5.5% of households in the wet season and 8.6% during dry season), uncovered rain water (8.1% of households during the wet season and 1.9% in the dry season), piped water (2.2% of households during the wet season and 1.8% in the dry season) and protected / covered springs (1.1% of households during the wet season and 1.3% in the dry season). Covered rain water was used as a main source by 0.3 percent of the households in the wet season and by 0.1 percent in the dry season and other services accounted for 1.9 percent in wet season and 1.3 percent in dry season Chart 3.159).



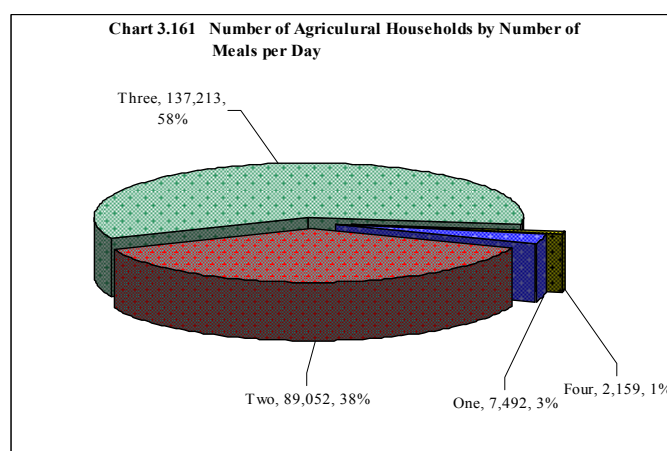
About 59 percent of the rural agricultural households in Tabora region obtained drinking water within a distance of less than one kilometer during wet season compared to 43 percent of the households during the dry season. However, 41 percent of the agricultural households obtained drinking water from a distance of one or more kilometers during wet compared to 57 percent of households in the dry season. The most common distance from the source of drinking water was between 500m and 2 km (Chart 3.160).



3.13.8 Food Consumption Pattern

3.13.8.1 Number of Meals per Day

The majority of households in Tabora region normally had 3 meals per day (58 percent of the households in the region). This was followed by 2 meals per day (38 percent) and 1 meal per day (3 percent). Only 1 percent of the households had 4 meals per day (Chart 3.161).



Tabora Urban had the largest percent of households eating one meal per day whilst Igunga had the highest percent of households eating three and four meals per day. (Table 3.17 and Map 3.63).

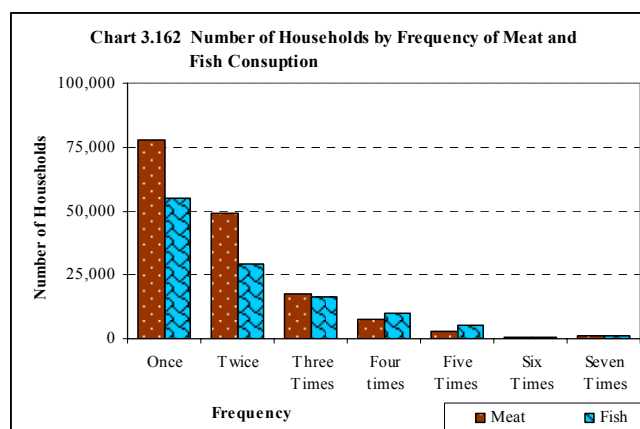
Table 3.17: Number of Households by Number of Meals the Household Normally

District	One	%	Two	%	Three	%	Four	%	Total
Nzega	1,190	1.8	19,042	29.0	44,886	68.5	447	0.7	65,566
Igunga	2,202	4.9	8,983	19.9	33,151	73.4	804	1.8	45,141
Uyui	1,934	4.7	14,990	36.3	23,789	57.6	605	1.5	41,318
Urambo	733	1.4	32,149	59.4	21,130	39.0	109	0.2	54,120
Sikonge	914	4.7	8,737	44.8	9,669	49.5	194	1.0	19,514
Tabora Urban	519	5.1	5,151	50.2	4,589	44.7	0	0.0	10,258
Total	7,492	3.2	89,052	37.7	137,213	58.2	2,159	0.9	235,917

3.13.8.2 Meat Consumption

Frequency

The number of agricultural households that consumed meat during the week preceding the census was 156,187 (66.2% of the agricultural households in Tabora region) with 77,552 households (49.7 % of those who consumed meat) consuming meat only once during the respective week. This was followed by those who had meat twice during the week (31.3%). Very few households had meat three or more times during the respective week. About 33.8 percent of the agricultural households in Tabora region did not eat meat during the week preceding the census (Chart 3.162 and Map 3.64).

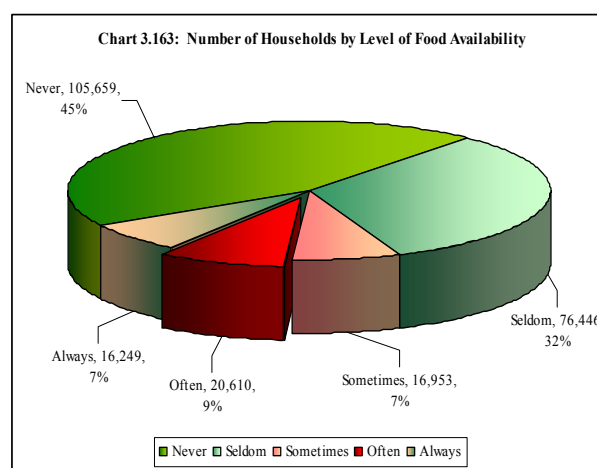


3.13.8.3 Fish Consumption Frequencies

The number of agricultural households that consumed fish during the week preceding the census was 117,195 (49.7% of the total agricultural households in Tabora region) with 54,881 households (46.8% of those who consumed fish) consuming fish once during the respective week. This was followed by those who had fish twice (29,025 households, 24.8 %), those who had fish three times (13.8%). In general, the percentage of households that consumed fish twice or more times during the week in Tabora region was 62,314 (53.2% of the agricultural households that ate fish in the region during the respective period). About 50.3 percent of the agricultural households in Tabora region did not eat fish during the week preceding the census (Chart 3.162 and Map 3.65).

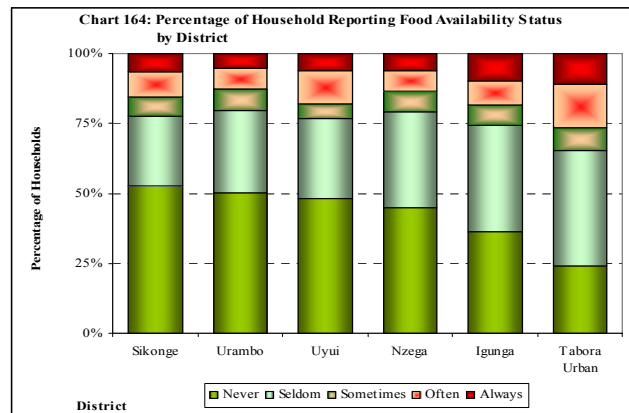
3.13.9 Food Security

In Tabora region, 76,446 households (32.4% of the total agricultural households in the region) said they rarely experienced problems in satisfying the household food requirement while 20,610 (8.7%) said they often experienced problems. However 7.2 percent sometimes experienced problems and 6.9 percent always had problems in satisfying the household food requirements. About 44.8 percent of the agricultural households said they did not experience any food insufficiency. (Map 3.66).



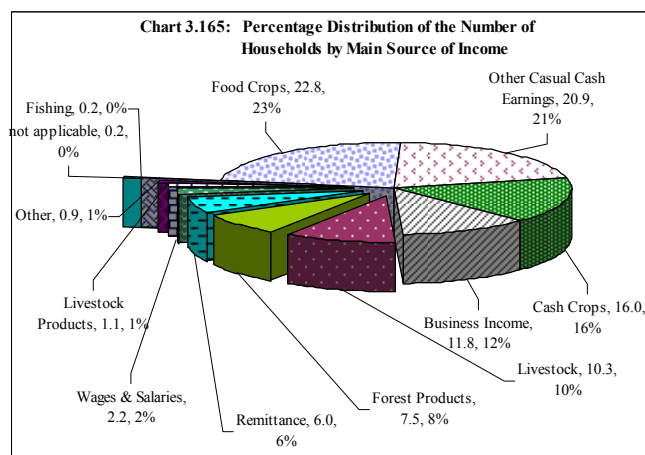
Tabora Urban had the highest percent of households that had problems in satisfying their household food requirements (35% of the agricultural households always or often having food problems). The percentage of households with food problems is also high in Igunga, Sikonge and Uyui.

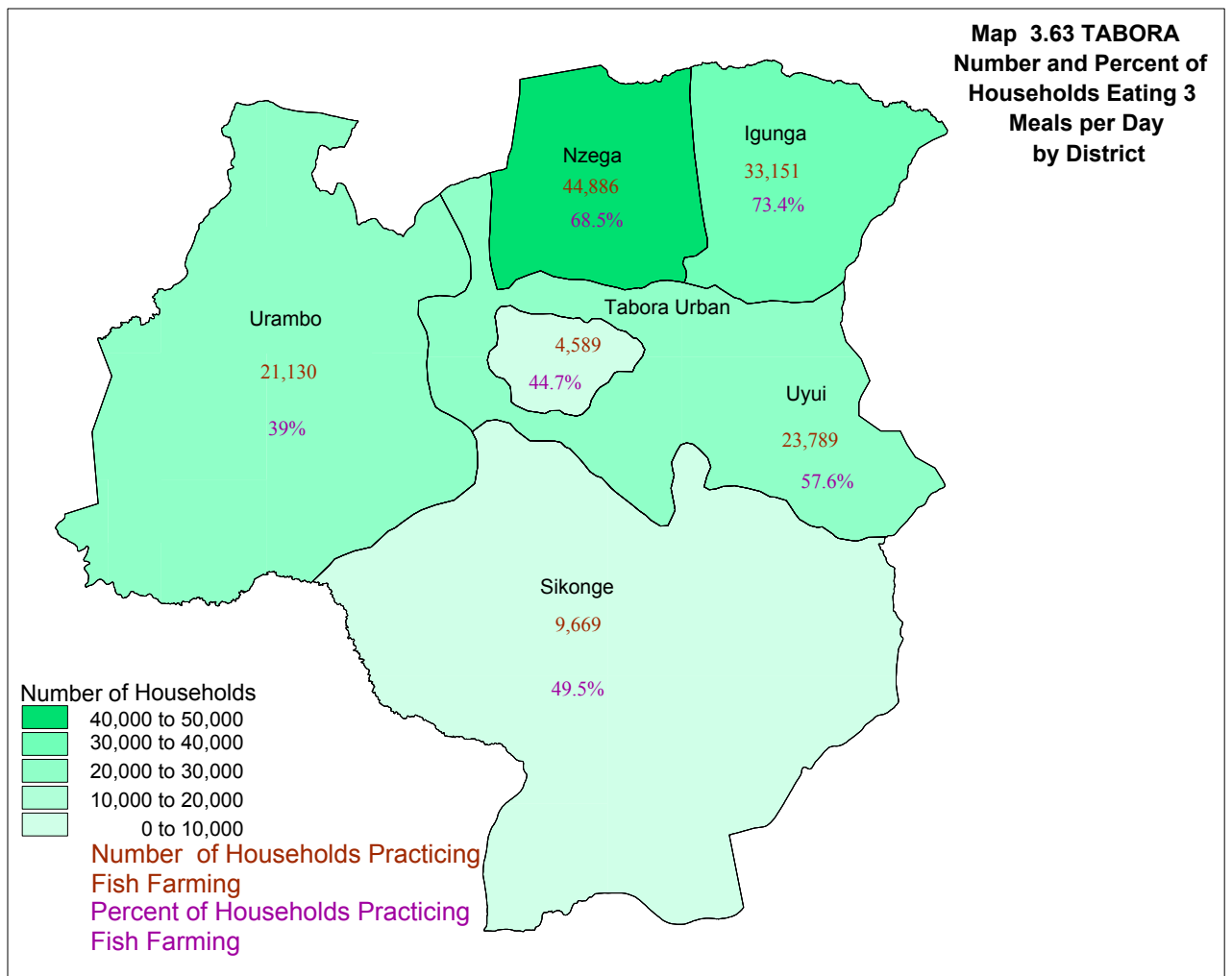
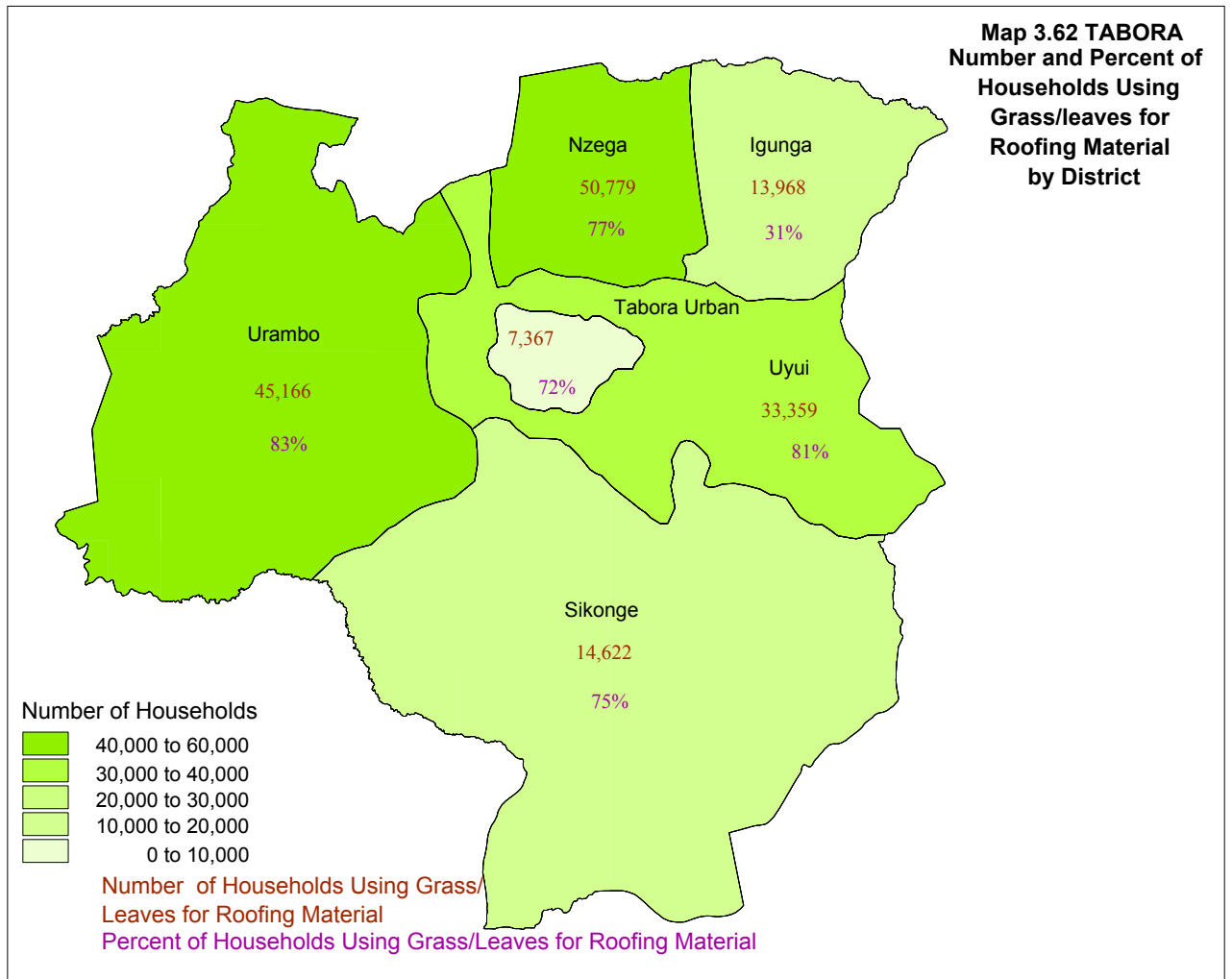
Urambo and Nzega districts had the lowest percentages of households that always or often faced food problems being between 20 and 21% of the agricultural households (Chart 3.164).

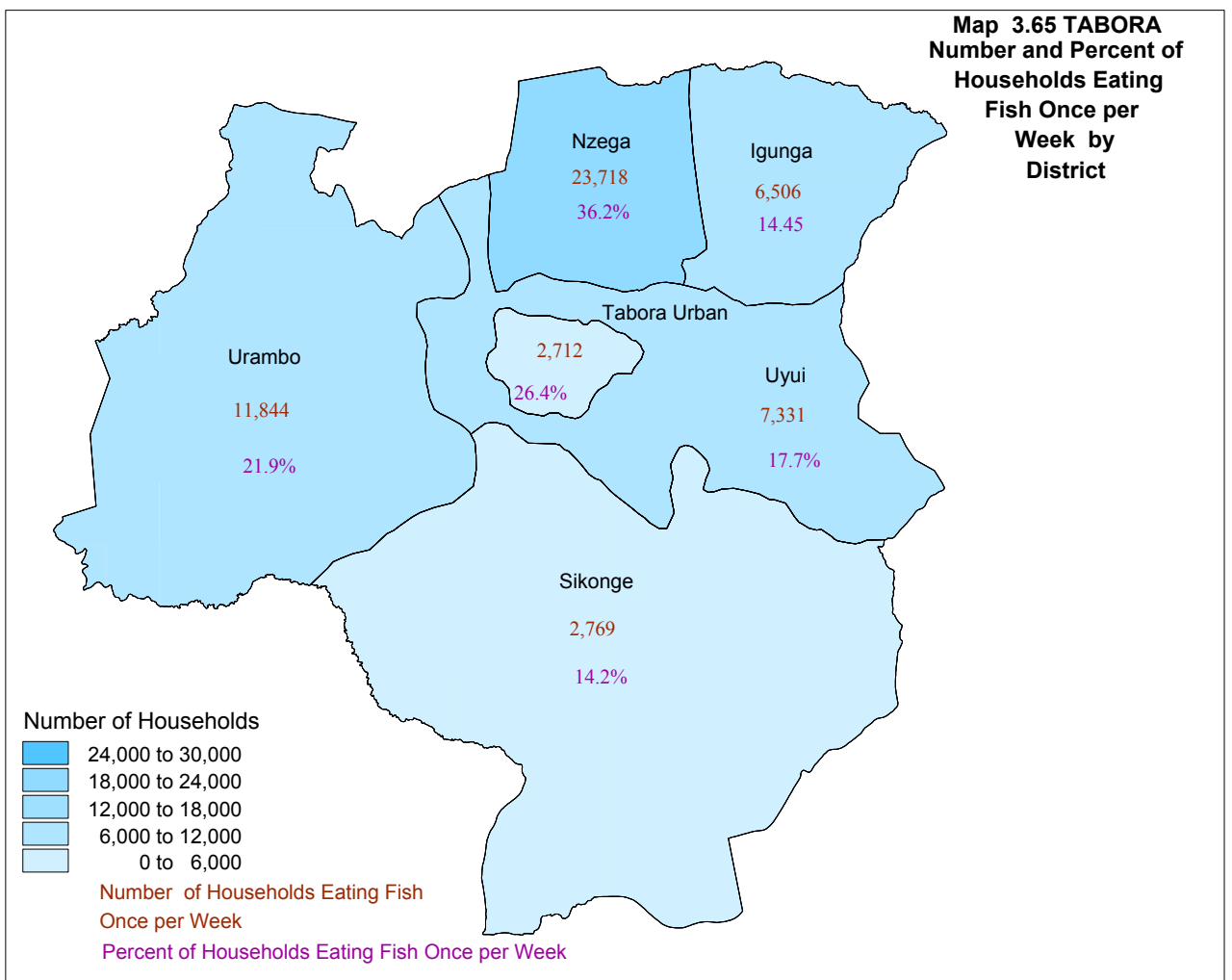
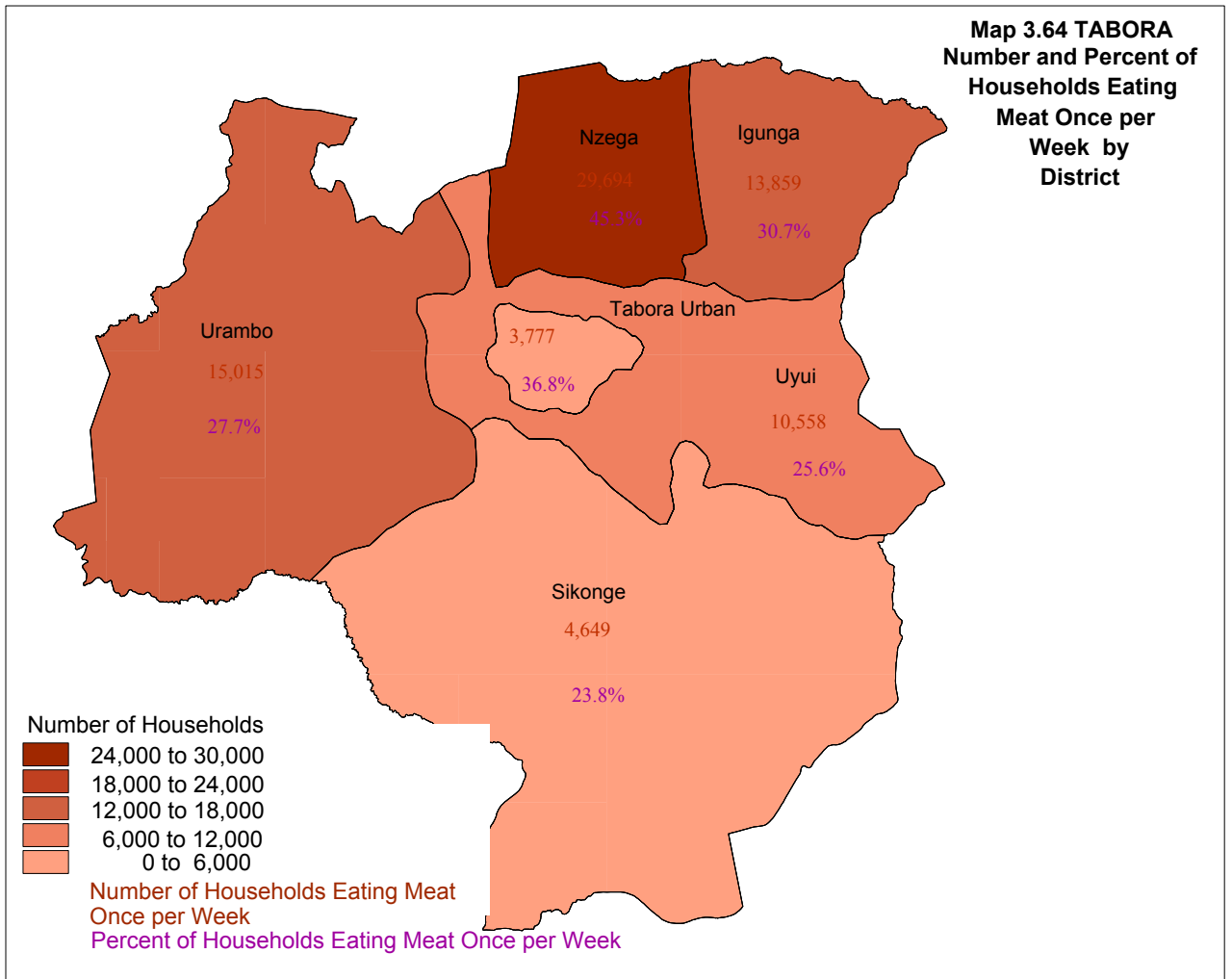


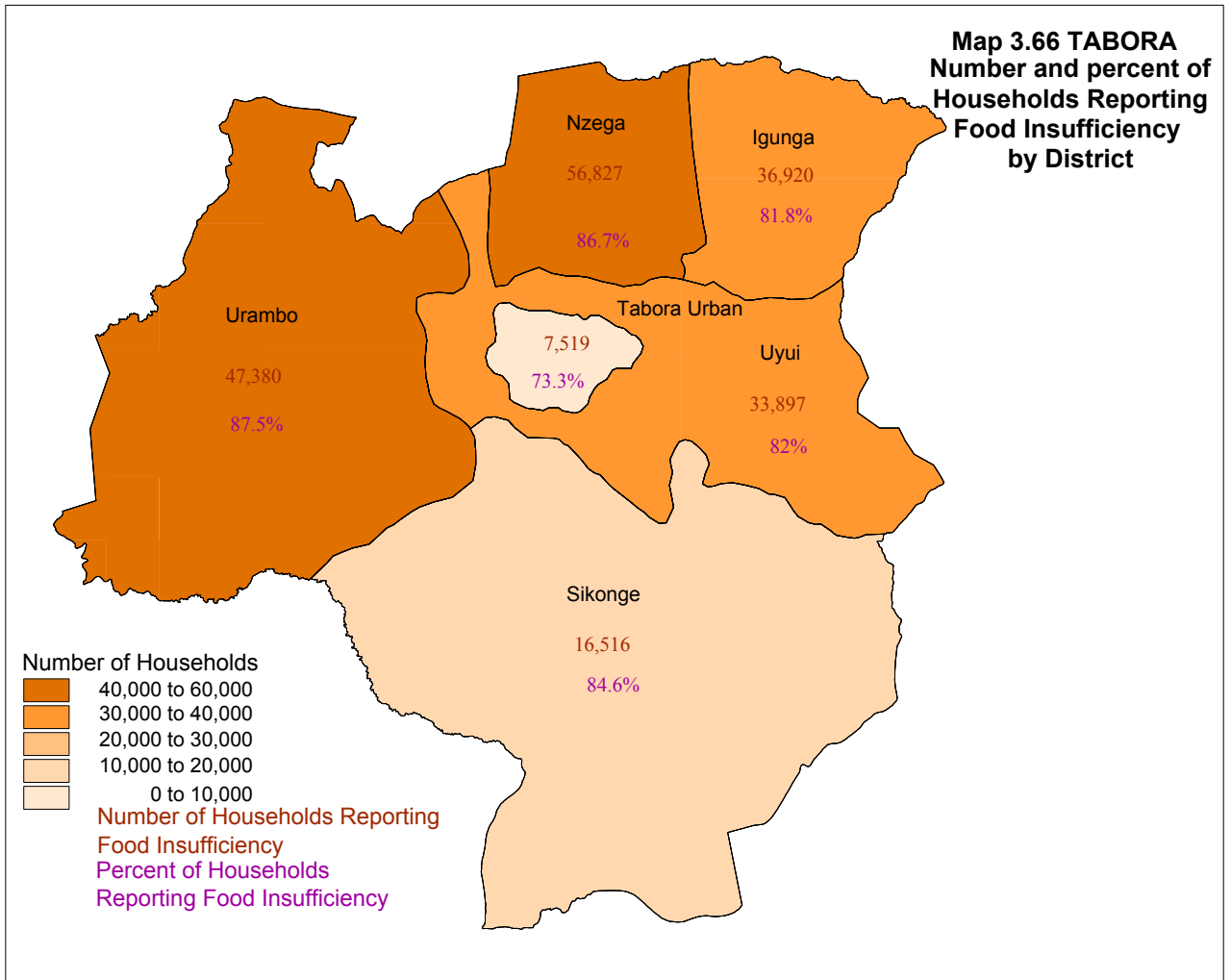
3.13.10 Main Sources of Cash Income

The main cash income of the households in Tabora region came from the selling of food crops (22.8 percent of smallholder households), followed by casual labour (20.9%), selling of cash crops (16.0%), businesses (11.8%), sale of livestock (10.3%) and cash remittances (6.0%). Only 2.2 percent of smallholder households reported the wages and salaries in cash were their main source of income followed by livestock products (1.1%) and fishing (0.2%) (Chart 3.165).









4 TABORA PROFILES

This section presents the status of crops and livestock production, access to natural resources and services, demography and poverty for both the region as a whole and for each district.

4.1 Region Profile

The region profile describes the status of the agriculture sector in the region and compares it with other regions in the country.

Tabora has a land area of around 600,000 hectares under cultivation. It is characterised by annual cropping with a very small amount of permanent crops. The percent of land available to smallholders that was utilised during the census year is one of the lowest in the country. This, coupled with its having one of the lowest number of crop growing households per square kilometre in Tanzania may indicate that there is more than sufficient accessible land in the region to satisfy the needs of the smallholder households. This is reflected by the low number of households responding to insufficiency of land. The region has only one planting season (the long rainy season).

Tabora has the fourth largest planted area of maize and rice in the country, however the yields during the census year were low. Although not the largest sorghum producing region, it has one of the largest area planted per household. It is a predominant tobacco growing region and has the second largest planted areas of groundnuts and onions in the country. Cassava and beans are of moderate to low importance in the region. Permanent crops consist of small areas of mangos and oil palm.

Although small, the region has a moderate planted area under irrigation and the number of households using irrigation has remained stable over a 10 year period. Wells and dams are the most common source of water for irrigation. Land clearing is predominantly by hand, however around half of the households use oxen for cultivation while the other half cultivates by hand. Tabora is one of the four regions in the country that uses noticeable quantities of inorganic fertilisers however, as with all other regions most of the planted area has no fertiliser application. Small amounts of insecticides and fungicides were used and the region is placed second in the use of these inputs. Crops are either stored unprotected or in traditional cribs. Compared to other regions, the percent of households selling crops was low. Practically all crop processing was done on neighbours machines, with small amounts sold to neighbours. A low percent of households received extension services in Tabora compared to other regions. Smallholders do not plant trees in Tabora and there are virtually no erosion control/water harvesting structures in the region.

4.2 District Profiles

The following district profiles highlights the characteristics of each district and compares them in relation to population, main crops and livestock, production and productivity, access to services and resources and levels of poverty.

4.2.1 Nzega

Nzega district had the largest number of households in the region and it had one of the highest percent of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by crop and livestock production. The district had no households keeping livestock only and no pastoralists were found in the district.

The most important livelihood activity for smallholder households in Nzega district was annual crop farming, followed by tree / forestry resources and livestock keeping. However, the district had the second lowest percent of households with no off-farm activities and the highest percent of households with more than one member with off-farm income. Compared to other districts in the region, Nzega had the highest percent of female headed households (17.1%) and it had one of the highest average age of the household head. With an average household size of 5 members per household it had about the same average as the region. Nzega has a comparatively low literacy rate among smallholder households and this was reflected by the concomitant relatively low level of school attendance in the region.. The literacy rate for the heads of household is also lower than other districts in the region.

It had the smallest utilized land area per household (1.9ha) and the allocated area was almost fully utilized indicating a high level of land pressure. The total planted area was greater than in some other districts in the region, however it had the lowest planted area per household (1.7ha) attributed to the high number of smallholders in the district.

The district is important for maize production in the region and had a planted area of over 52,000ha; however the planted area per household was the lowest in the region. Paddy production was also very important with a largest planted area of 25,289 hectares but the production of sorghum is small. Cassava production was moderate accounting for 14.2 percent of the quantity harvested in the region. The district had the smallest planted area of sweet potatoes (673 ha) and it was one of the two districts in the region which didn't grow Irish potatoes. The district was among the lowest beans producer in the region with a planted area of 1,064ha. Oilseed crops were very important in Nzega and the district had the largest area planted with groundnuts (19,722ha). Vegetable production was moderately important in the district. It had moderate area planted with tomatoes and onion (120 ha and 151 ha respectively). Traditional cash crops (e.g. tobacco and cotton) were grown in small quantities.

Compared to other districts in the region, Nzega had the second smallest area planted with permanent crops which were dominated by mango (649 ha), guava (279 ha) and oranges (234 ha). Other permanent crops were either not grown or were grown in very small quantities.

In Nzega district most land clearing and preparation was done by oxen followed by hand cultivation, however slightly more land preparation was done by tractor compared to most other districts.

The use of inputs in the region is very small, however district differences exist. Nzega has the second smallest planted area with improved seed in Tabora region. The district has the largest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer), however most of this is farm yard manure. Compared to other districts in the region, Nzega district has a small level of insecticide use. The use of fungicides, although small, was moderate to high compared to other districts. The use of herbicides is also small. The district has the fourth largest area with 6,125 ha of irrigated land. The most common source of water for irrigation is from dams using gravity and hand bucket. Flood and bucket are the most common means of irrigation water application.

The most common method of crop storage is in sacks / open drums followed by storing in locally made traditional structures, however the district has the second largest proportion of households storing crops in sacks / open drums compared to other districts in the region. The district has the second largest number of households selling crops, however for those who did not sell, the main reason for not selling is insufficient production. The highest percent of households

processing crops in Tabora region is found in Nzega district and is almost all done by neighbor machines. The district also has a higher percent of households selling processed crops to local markets/trade stores than other districts and no sales are to secondary markets, marketing cooperatives, farmers association or large scale farms. Although small, access to credit in the district is to men only and the main sources are religious organisations/NGO projects and traders/trade stores.

A comparatively larger number of households receive extension services in Nzega and almost all of this is from the government. The quality of extension services was rated between good and average by the majority of the households.

Tree farming is not important in Nzega (with 98 planted trees) and is mostly *Gravellia* with some *Azadirachta* and *leucena* spp. The second highest proportion of households with erosion control and water harvesting structures is found in Nzega district and are mostly erosion control bunds; however it also has moderate number of dams and drainage ditches compared to other districts.

The district has the second largest number of cattle in the region and they are almost all indigenous. Goat and sheep production is moderate compared to other districts. It has a moderate number of pigs in the region and has the third highest number of chickens. Although small, the district has the highest number of layers in the region. Nzega district has moderate to small numbers of ducks, turkeys and donkeys are also found in the district. The smallest number of households reporting Tsetse and tick problems was in Nzega district and it had the second largest number of households de-worming livestock. The use of draft animals in the district is high. Fish farming is virtually absent in the district.

It has amongst the best access to primary schools, all weather roads and primary and secondary markets compared to other districts. However, it has one of the worst accesses to health clinics and regional capital.

Nzega district has the third highest percent of households with no toilet facilities. The district has the highest percent of households owning bicycles, the second highest number of households owning vehicles and the third highest number of households owning TV/Video sets. It has small number of households using mains electricity. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has the third highest percent of households with grass roofs with 12 percent of households having iron sheets. The most common source of drinking water is from unprotected wells. The district is among the districts with the lowest percent of households having one meal per day. It has the moderate percent of households having two meals per day compared to other districts and amongst the highest percent with 3 meals per day. The district had the lowest percent of households that did not eat meat during the week prior to enumeration and amongst the district with highest percent of household that did not eat fish in the same week; however most households never had problems with food satisfaction.

4.2.2 Igunga

Igunga district had the third largest number of households in the region and was among the districts with the highest percentages of households involved in smallholder agriculture in the region. Most smallholders were involved in crop and livestock production, followed by crop farming only. It had a very small number of livestock only households and no pastoralists were found in the district.

The most important livelihood activity for smallholder households in Igunga district was annual crop farming, followed by off farm income. The district had the lowest percent of households with no off-farm activities although it had the second

highest percent of households with more than one member with off-farm income. Compared to other districts in the region, Igunga had a lowest percent of female headed households (11.3%) and it had one of the moderate average age of the household head in the region. With an average household size of 7 members per household it was above the average for the region. Igunga has a comparatively moderate literacy rate among smallholder households and this was reflected by the district having the moderate level of school attendance in the region. The literacy rate for the heads of household was lower than most districts in the region.

It has a largest utilized land area per household (3.8ha) and 92.1 percent of the allocated area was being utilized. The district had the largest planted area in the region, and the largest planted area per household (3.2ha).

The district is important for maize production in the region and had the largest planted area of over 56,000 ha, and the planted area per household was also large for the region. The district had moderate planted area of paddy in the region with 6,560 hectares. Igunga had the largest planted area for sorghum (38,804ha) whilst cassava production was low, accounting for 3.9 percent of the quantity harvested in the region. The district had the largest area planted with sweet potatoes (3,639ha) but a very small planted area of Irish potatoes (112 ha). The production of beans in Igunga was very small compared to other districts in the region with a planted area of 319ha. Igunga district had a moderate planted area for groundnuts and an area planted per household of 0.5 ha. Vegetable production was important in the district. It had the largest planted area for onions in the region accounting for 80.4 percent of the onions planted area. Other vegetables were grown in small quantities. Cotton and tobacco were the cash crops grown in the district. The district had the largest area planted with cotton (21,751ha). Tobacco was very small.

Compared to other districts in the region, Igunga had the third largest area planted with permanent crops which were dominated by mango (2,069 ha), coconuts (268 ha), sugar cane (47 ha) and pawpaw (40 ha). Other permanent crops were either not grown or were grown in very small quantities.

As with other districts in the region, most land clearing and preparation was done by oxen ploughing followed by hand cultivation, however a very small amount of land preparation was done by tractor.

The use of inputs in the region is very small, however district differences exist. Igunga has the fifth largest planted area with improved seed in Tabora region. Also, the district has the fifth largest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer), most of these are farm yard manure and inorganic fertilizers. Compared to other districts in the region, Igunga district has the third largest area of insecticide use and has the second largest area of fungicide and herbicide use. It has the third largest area with irrigation compared to other districts with 6,822 ha of irrigated land. The most common source of water for irrigation is from dams using gravity. Flood irrigation is the most common means of irrigation water application and a small amount of bucket / watering can is used.

The most common method of crop storage in Igunga is locally made traditional structures, however the proportion of households storing crops in the district is lower compared to other districts in the region. The district has the fourth highest percent of households selling crops, however for those who did not sell, the main reason for not selling is the fact that the open market price was too low. Igunga district is one of the districts in Tabora region with moderate percent of households processing crops and is almost all done by neighbor machines. There is no agro-processing carried out by co-operatives. The district has the second largest number of households selling primary processed products. Although very small, access to credit in the district is to men (100% of those who accessed credit) and the main sources are family friends and relatives.

A comparatively small number of households receive extension services in Igunga district and most of this is from the government. The quality of extension services was rated between good and very good by the majority of the households.

Tree farming is not very important in Tabora region. Igunga district has the smallest number of planted trees in the region (with 32 planted trees) and is mostly *Moringa Spp* with some *Sena Spp* and *Azadirachta Spp*. Igunga has the lowest number of households with water control bunds.

The district has a largest number of cattle in the region and they are almost all indigenous. Goat and sheep production is also highest compared to other districts. Pigs were virtually absent in the district and has the third largest number of chickens, almost all are indigenous. Igunga has the fourth largest number of improved chickens in the region. The district has the largest number of ducks and donkeys, however small numbers of rabbits are also found in the district. Turkeys are virtually not found in the district. A number of households reported tsetse and tick problems in Igunga district. De-worming of livestock is also practiced in Igunga. The use of draft animals in the district exists. A small number of households' practice fish farming, however the district has the second largest number in the region.

The district has the second largest number of donkeys and turkeys. Some ducks are also found in the district. A number of households reported tsetse problem. Igunga district had the second largest number of households reported of ticks and it had the second largest number of households de-worming livestock. The district has the largest number of households using draft animals in the region. Fish farming is virtually absent in the region.

It has amongst the best access to secondary schools, primary schools, all feeder roads, health clinics and primary, secondary and tertiary markets compared to other districts. However, it has one of the worst access to regional capital and tarmac roads.

Igunga district has the highest percentage of households without toilet facility (23.9%) and it is among the districts with the lowest percent of households owning radios and iron. The district has the second percent of households owning bicycles and has third percent of households owning mobile phones and vehicles. It has the largest percent of households owning wheelbarrows and televisions/videos. The most common source of drinking water is from unprotected wells and uncovered rainwater catchments. It is one of the districts with the highest percent of households having three meals per day. The district had the second highest percent of households that did not eat meat and has the highest percent of households that did not eat fish during the week prior to enumeration, however most households seldom had problems with food satisfaction.

4.2.3 Uyui

Uyui district had the fourth largest number of households in the region and it had the highest percent of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by crop and livestock production. It had a small number of livestock only households and no pastoralists were found in the district.

The most important livelihood activity for smallholder households in Uyui district was annual crop farming, followed by off-farm income. The district had the second highest percent of households with no off-farm activities and the lowest percent of households with more than one member with off-farm income. Compared to other districts in the region, Uyui had a relatively low percent of female headed households (13.8%) and it had one of the moderate average age of the household head in the region. With an average household size of 7 members per household it was above the average for the region. Uyui had a comparatively low literacy rate among smallholder households and this was reflected by the

concomitant relatively high level of population not attended schools in the region. The literacy rate for the heads of household was moderate compared with other districts in the region.

It had higher utilized land area per household (3.2ha) than the regional average of 2.9 ha and 73.2 percent of the allocated area was being utilized. The district had the fourth largest total planted area as compared to other districts in the region. Also, the district had the third largest planted area per household (2.3ha).

The district is moderately important for maize production in the region and had a planted area of over 46,418 ha, however the planted area per household was 1.1 ha which was moderate in the region. Paddy production was also important with a planted area of 14,587 hectares. Sorghum was less important with a planted area of 3,162 hectares. Irish potatoes and wheat were not produced in the district. The district had a moderately large planted area of cassava accounting for 15.5 percent of the cassava planted area in the region. The production of beans in Uyui was much lower than Urambo district but higher than other districts in the region with a planted area of 3,654ha. Oilseed crops were important in Uyui with 98.2 percent of the groundnuts grown in the district. Uyui district had the largest area planted with vegetable in the region. A very small quantity of cotton was planted in the district. The district had the second largest planted area for tobacco.

Permanent crops were less important in Uyui district (12.9% of the total permanent crop planted area in Tabora region is found in the district). The most prominent permanent crops in the district include mango (432 ha), guava (329 ha) and palm oil (291 ha). Other permanent crops were either not grown or were grown in very small quantities.

As with other districts in the region, most land clearing and preparation was done by hand followed by oxen, only very small land preparation was done by tractors.

The use of inputs in the region is very small, however district differences exist. Uyui has the second largest planted area with improved seed in Tabora region. The district has the third largest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer), most of these are inorganic fertilizers and farm yard manure. Compared to other districts in the region, Uyui district has the second largest area of insecticide use and has the third largest area of fungicide and herbicide use. It has the second largest area with irrigation compared to other districts with 7,037 ha of irrigated land. The most common source of water for irrigation is from dams using hand bucket. Bucket/watering cans is the most common means of irrigation water application and a small amount of flood irrigation is used.

The most common method of crop storage in Uyui is sacks and open drums, however the proportion of households storing crops in the district is moderate compared to other districts in the region. The district has the third highest percent of households selling crops, however for those who did not sell, the main reason for not selling is the fact that the open market price was too low. Uyui district is one of the districts in Tabora region with a high percent of households processing crops and is almost all done by neighbor machines. In the district the agro-processing is not carried out neither by traders, co-operatives nor factories. The district has the smallest number of households selling primary processed products. Although very small, access to credit in the district is mostly to men (96% of those who accessed credit) and the main sources are cooperatives, family friends and relatives.

A comparatively moderate number of households receive extension services in Uyui district and most of this is from the government. The quality of extension services was rated between good and very good by the majority of the households.

Tree farming is not very important in Tabora region. However, Uyui district has the largest number of planted trees in the region (with 793 planted trees) and is mostly Moringa Spp with some Eucalyptus Spp. Uyui has the highest number of households with dams, tree belts and water harvesting bunds.

The district has a moderate number of cattle in the region and they are almost all indigenous. Goat and sheep production is moderate compared to other districts. It has the third largest number of pigs in the region and the second largest number of chickens. Most of them are indigenous. Uyui has the second largest number of improved chickens in the region. The district has the largest number of ducks and donkeys, however small numbers of rabbits are also found in the district. Turkeys are virtually not found in the district. A number of households reported tsetse and tick problems in Uyui district. De-worming of livestock is also practiced in Uyui. The use of draft animals in the district exists. A small number of households' practice fish farming, however the district has the second largest number in the region.

Uyui district is not amongst the best access to any infrastructure compared to other districts. However, it has one of the worst access to secondary schools, primary schools, feeder roads, hospitals, health clinics, district capital, secondary markets and tertiary markets.

Uyui district has a moderate percent of households with no toilet facilities and it has the highest percent of households owning vehicles and has the second highest percent of households owning land lines, TV/Video and mobile phones. It has the third lowest number of households owning wheelbarrows, radios and bicycles. Uyui district has the third highest percent of households using mains electricity in the region. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has a high percent of households with grass roofs (80.7%) with 16.2 percent of households having iron sheets. The most common source of drinking water is from unprotected wells. Forty one percent of the households in the district reported having one or two meals per day and the rest were having three meals per day. Very few households were having four meals per day. The district had a highest percent of households that did not eat meat compared to other districts and moderate percent of households that did not eat fish during the week prior to enumeration, however most households reported to have no food satisfaction.

4.2.4 Urambo

Urambo district had the second largest number of households in the region and it had the fifth highest percent of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by crop and livestock production. In Urambo district there were no households involved in livestock only. Also, no pastoralists were found.

The most important livelihood activity for smallholder households in Urambo district was annual crop farming followed by off-farm income. It had the third lowest percent of households with no off-farm activities and the third highest percent of households with more than one member with off-farm income. Compared to other districts in the region, Urambo district had a relatively low percent of female headed households (13.7%) and it had one of the lowest average age of the household head. Its average household size of 6 members per household was higher than the average for the region. Urambo district had a comparatively high literacy rate among smallholder households and this was reflected by the concomitant relatively high level of school attendance in the region. The literacy rate for the female heads of household was lower than that of Sikonge district but slightly higher than those of other districts in the region.

It has the third largest utilized land area per household (3.0 ha) and only 69.1 percent of the allocated land area had been utilized. The total planted area was moderate compared to other districts in the region, however it had the second lowest planted area per household (2.2 ha) attributed to the high number of smallholders in the district.

Urambo district is more or less important for maize production in the region and had a planted area of 46,076 ha, however the planted area per household was among the lowest in the region. Paddy production was also more or less important with a planted area of only 11,904 hectares but the production of sorghum was small.

The production of cassava and beans in Urambo district was much higher than in other districts. The district had the second largest area planted with oil seeds especially groundnuts. Vegetable production was not very important in the district. The most important vegetable produced was tomatoes followed by amaranths and onions. Other vegetables were produced in very small quantities. Urambo district had the largest area planted with tobacco (15,565 ha). Cash crops such as cotton were grown in small quantities.

Urambo district had the largest area planted with permanent crops (58.6% of the total permanent crop planted area in Tabora region is found in the district). The most prominent permanent crops in the district include palm oil (1,859 ha), mango (1,618 ha), banana (1,362 ha) and pawpaw (516 ha). Other permanent crops were either not grown or were grown in small quantities.

As with other districts in the region, most land clearing and preparation was done by hand followed by oxen, very small land preparation was done by tractor.

The use of inputs in the region is very small, however district differences exist. Urambo has the largest planted area with improved seed in Tabora region. The district has the second largest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer). Most of these are inorganic fertilizers followed by farm yard manure. Compared to other districts in the region, Urambo district has the largest area of insecticide use and has the largest area of fungicide and herbicide use. It has the largest area with irrigation compared to other districts with 9,624 ha of irrigated land. The most common source of water for irrigation is from wells using hand bucket. Bucket/watering cans is the most common means of irrigation water application and a small amount of flood irrigation is used.

The most common method of crop storage in Urambo is sacks and open drums, however the proportion of households storing crops in the district is high compared to most of other districts in the region. The district has the highest percent of households selling crops, however for those who did not sell, the main reason for not selling is the fact that the open market price was too low. Urambo district is one of the districts in Tabora region with a high percent of households processing crops and is almost all done by neighbor machines. However, the agro-processing is not done by traders, co-operatives or by factories. The district has no households selling primary processed products. Although small, access to credit in the district is mostly to men (99% of those who accessed credit) and the main sources are co-operatives. Sikonge district has the third largest number of households received agricultural credits in the region.

A comparatively high number of households receive extension services in Urambo district and most of this is from the government. The quality of extension services was rated between good and very good by the majority of the households.

Tree farming is not very important in Tabora region. However, Urambo district has the second largest number of planted trees in the region (with 608 planted trees) and is mostly *Albizia Spp* with some *Acacia Spp*. Urambo has the highest number of households with dams, tree belts and water harvesting bunds.

The district has a moderate number of cattle in the region and they are almost all indigenous. Goat and sheep production is moderate to low compared to other districts. It has the largest number of pigs in the region and the largest number of chickens, all of which are indigenous. Urambo has the third largest number of improved chickens in the region. The district has the largest number of rabbits and has the third largest number of ducks. Turkeys and donkeys are virtually not present in the district. A number of households reported tick problem is relatively small but the district has the largest number of households reported tsetse problems in the region. De-worming of livestock is also practiced in Urambo. The use of draft animals in the district exists. Fish farming is virtually absent in the district.

Urambo district is not amongst the best access to any infrastructure compared to other districts. However, it has one of the worst accesses to primary schools, hospitals, district capital, regional capital and tarmac road.

Urambo district has relatively low percent of households with no toilet facilities and it has the highest percent of households owning radio and has the second highest percent of households owning iron. It has the third lowest number of households owning bicycle. Urambo district has the lowest percent of households owning vehicles and the use of is virtually absent. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has a highest percent of households with grass roofs (83.3%) with 10.9 percent of households having iron sheets. The most common source of drinking water is from unprotected wells. Sixty one percent of the households in the district reported having one or two meals per day and the rest were having three meals per day. Very few households were having four meals per day. The district was amongst the districts with the lowest percent of households that did not eat meat or fish the week prior to enumeration, however most households reported to have food satisfaction.

4.2.5 Sikonge

Sikonge district had the lowest number of households in the region and it had the fourth highest percent of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by crop and livestock production. In Sikonge district, very few households were involved in livestock only. Also, pastoralists were virtually absent.

The most important livelihood activity for smallholder households in Sikonge district was annual crop farming followed by livestock keeping / herding. It had the highest percent of households with no off-farm activities and the fourth highest percent of households with more than one member with off-farm income. Compared to other districts in the region, Sikonge district had a relatively low percent of female headed households (13.5%) and it had one of the lowest average age of the household head. Its average household size of 6 members per household was higher than the average for the region. Sikonge district has a comparatively high literacy rate among smallholder households and this was reflected by the concomitant relatively high level of school attendance in the region. The literacy rate for the female heads of household was the highest in the region.

It had the third largest utilized land area per household (3.0 ha) and only 69.9 percent of the allocated land area had been utilized. The total planted area was small compared to other districts in the region, however it had the second largest planted area per household (2.7 ha) attributed to the low number of smallholders in the district.

Sikonge district was more or less important for maize production in the region with a planted area of 22,958 ha and had the second largest planted area per household in the region. Paddy, cassava and groundnuts production were more or less important with a planted area of only 5,193 hectares, 1,829 hectares and 7,863 hectares respectively.

The production of sorghum and beans in Sikonge district was also more or less important in the region for which it had the third largest planted area in the region. Vegetable production was not very important in the district. The most important vegetable produced is radish followed by okra. Other vegetables were produced in very small quantities. Sikonge district had a moderate planted area of tobacco (5,735 ha) compared to other districts in the region.

Sikonge district had the smallest area planted with permanent crops (0.9% of the total permanent crop planted area in Tabora region is found in the district). The most prominent permanent crops in the district was mango (53 ha) followed by banana (19 ha) and oranges (8 ha). Other permanent crops were either not grown or were grown in very small quantities.

As with other districts in the region, most land clearing and preparation was done by hand followed by oxen, very small land preparation was done by tractor.

The use of inputs in the region is very small, however district differences exist. Sikonge has the fourth largest planted area with improved seed in Tabora region. The district has the third largest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer). Most of these are inorganic fertilizers followed by farm yard manure. Compared to other districts in the region, Sikonge district has the fourth largest area of insecticide use, fungicide and herbicide use. It has the smallest area with irrigation compared to other districts with 2,520 ha of irrigated land. The most common source of water for irrigation is from wells using hand bucket. Bucket/watering cans is the most common means of irrigation water application and a small amount of flood irrigation is used.

The most common method of crop storage in Sikonge is locally made traditional structures followed by sacks and open drums. The proportion of households storing crops in the district is highest compared to most of other districts in the region. The district has the second highest percent of households selling crops, however for those who did not sell, the main reason for not selling is the fact that the open market price was too low. Sikonge district is one of the districts in Tabora region with a highest percent of households processing crops and is almost all done by neighbor machines. However, the agro-processing is not done by traders or by factories. The district has small number of households selling primary processed products. Most of the products are sold to neighbours. Although small, access to credit in the district is mostly to men (99% of those who accessed credit) and the main sources are co-operatives. Sikonge district has the third largest number of households received agricultural credits in the region.

A comparatively low number of households receive extension services in Sikonge district and most of this is from the government. The quality of extension services was rated between good and very good by the majority of the households.

Tree farming is not very important in Tabora region. However, Sikonge district has the second smallest number of planted trees in the region (with 226 planted trees) and is mostly Moringa Spp with some Pinus Spp. and Acacia Spp. Sikonge is among the districts with the highest number of households water harvesting bunds and a moderate number of households with erosion control bunds.

The district has the third largest number of cattle in the region and they are almost all indigenous. Goat and sheep production is moderate to small compared to other districts. Pig rearing in Sikonge district is virtually absent. Sikonge has the second smallest number of chickens and very small number of improved chickens. Also, the district has very small number of ducks, turkeys, rabbits and donkeys. A number of households reported tick problem is relatively small but the district has the moderate number of households reported tsetse problems in the region. De-worming of livestock is also practiced in Urambo. The use of draft animals in the district exists. Very small number of households practice fish farming; however the district has the largest number of harvested fish in the region.

Sikonge district is amongst the worst access to some infrastructure compared to other districts. It is one amongst districts with the worst access to secondary schools, primary schools, all weather roads, hospitals, district capital, regional capital, primary markets, secondary markets tertiary markets and tarmac road.

Sikonge district has a high percent of households with no toilet facilities and it has the highest percent of households owning iron. It has the second highest percent of households owning radio and wheelbarrow and has the third, fourth and fifth percent of households owning television/video, mobile telephones and bicycle respectively. Sikonge district has the lowest percent of households using mains electricity in the region. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has a high percent of households with grass roofs (74.9%) with 20.5 percent of households having iron sheets. The most common source of drinking water is from unprotected wells. Fifty percent of the households in the district reported having one or two meals per day and the rest were having three meals per day. Very few households were having four meals per day. The district had the second smallest percent of households that did not eat meat during the week prior to enumeration and among the district with moderate percent of household that did not eat fish in the same week; however most households never had problems with food satisfaction.

4.2.6 Tabora Urban

Tabora Urban district had the second lowest number of households in the region and it had the smallest percent of households involved in smallholder agriculture in the region. Most smallholders were involved in crop farming only, followed by crop and livestock production. In Tabora Urban, very few households were involved in livestock only. Also, pastoralists were virtually absent.

The most important livelihood activity for smallholder households in Tabora Urban district was annual crop farming followed by off-farm income. It had the third highest percent of households with no off-farm activities and the fifth highest percent of households with more than one member with off-farm income. Compared to other districts in the region, Tabora Urban had a relatively high percent of female headed households (16.75%) and it had one of the highest average age of the household head. Its average household size of 5 members per household was about the same as the average for the region. Tabora Urban has a highest literacy rate among smallholder households. The literacy rate for the female heads of household was moderate as compared to other districts in the region.

It had the fifth largest utilized land area per household (2.3 ha) and only 70.4 percent of the allocated land area had been utilized. The total planted area was the smallest in the region, it also had the smallest planted area per household (1.7 ha) attributed to the large number of smallholders in the district.

Tabora Urban is almost important for maize production in the region and had a planted area of 7,844 ha and has the least planted area per household in the region. Paddy production was also more or less important with a planted area of 2,124 ha. A very small area was planted with sorghum while the production of bulrush millet and finger millet was virtually absent. Cassava production was low accounting for 6.4 percent of the quantity harvested in the region. The district had a small planted area of sweet potatoes (772 ha). The production of beans in Tabora Urban was smaller than in other districts in the region with a planted area of 1,439ha. Oilseed crops were not important in Tabora Urban and it had the sixth groundnuts planted area in the region. Vegetable production was not very important in the district. It had the second largest planted area for tomatoes (221ha) and a small planted area of onions (41ha) and amaranths (24ha). The production of tomatoes and amaranths accounted for 30.1 percent and 67.6 percent respectively in the region. Traditional cash crops (especially tobacco) were grown in very small quantities.

Tabora Urban has the third smallest planted area for permanent crops (9.4% of the total permanent crop planted area in Tabora region is found in the district). The most prominent permanent crops in the district was mango (788 ha) followed by banana (56 ha) and sugar cane (62 ha). Oil palm was grown in small quantities (10ha) whilst other permanent crops were either not grown or were grown in very small quantities.

As with other districts in the region, most land clearing and preparation was done by hand followed by oxen, very small land preparation was done by tractors.

The use of inputs in the region is very small, however district differences exist. Tabora Urban has the smallest planted area with improved seed in Tabora region. The district has the smallest planted area with fertilizers (Farm yard manure, compost and inorganic fertilizer). Most of these are farm yard manure followed by inorganic fertilizers. Compared to other districts in the region, Tabora Urban district has the smallest area of insecticide use, fungicide and herbicide use. It has the second smallest area with irrigation compared to other districts with 2,738 ha of irrigated land. The most common source of water for irrigation is from dams using hand bucket. Bucket/watering cans is the most common means of irrigation water application and a small amount of water hose irrigation is used.

The most common method of crop storage in Tabora Urban is sacks and open drums followed by locally made traditional structures. The proportion of households storing crops in the district is higher compared to some other districts in the region. The district has the fifth highest percent of households selling crops, however for those who did not sell, the main reason for not selling is the fact that the open market price was too low. Tabora Urban is one of the districts in Tabora region with a highest percent of households processing crops and most of them are done by neighbor machines. However, the agro-processing done by factories is virtually absent. The district has small number of households selling primary processed products. Most of the products are sold to neighbours. Although small, access to credit in the district is to men (100% of those who accessed credit) and the main sources are co-operatives. Tabora Urban has the smallest number of households received agricultural credits in the region.

A comparatively low number of households receive extension services in Tabora Urban and most of this is from the government. The quality of extension services was rated between average and good by the majority of the households.

Tree farming is not very important in Tabora region. Tabora Urban has the smallest number of planted trees in the region (with 108 planted trees) and is mostly *Albizia Spp* with some *Moringa Spp.* and *Leucena Spp.* Tabora Urban is among the districts with moderate to small number of households with erosion control bunds, drainage ditches and terraces.

The district has the smallest number of cattle, goats, sheep and pigs in the region and they are almost all indigenous. It has the least number of chickens in the region and rearing of improved chicken is virtually absent. The district has the smallest number of ducks in the region and it has no turkeys, rabbits or donkeys. A number of households reported tsetse and tick problems in Tabora Urban district is small. De-worming of livestock is also practiced in Tabora Urban. The use of draft animals in the district exists. Very small number of households practice fish farming; however the district has the largest number of harvested fish in the region.

Tabora Urban is the best access to most infrastructures compared to other districts. It is the best district with the best access to all weather roads, feeder roads, district capital, regional capital, secondary markets, tertiary markets and tarmac roads. Also, the district is amongst the districts with best access to primary and secondary schools, health clinics, hospitals and primary markets.

Tabora Urban has a lowest percent of households with no toilet facilities and it has the highest percent of households owning mobile phones. It has the second highest percent of households owning radio and has the third highest percent of households owning landline phones and wheelbarrows. The district has the fourth percent of households owning iron and has the smallest percent of households owning bicycles. Tabora Urban has the second highest percent of households using mains electricity in the region. The most common source of energy for lighting is the wick lamp and practically all households use firewood for cooking. The district has a second lowest percent of households with grass roofs (71.8%) and a highest percent of households having iron sheets (22.8%). The most common source of drinking water is from unprotected wells. Fifty five percent of the households in the district reported having one or two meals per day and the rest were having three meals per day. The district had the third largest percent of households that did not eat meat during the week prior to enumeration and among the district with lowest percent of household that did not eat fish in the same week; however most households seldom had problems with food satisfaction.

TYPE OF AGRICULTURE HOUSEHOLD

2.1: TYPE OF AGRICULTURE HOUSEHOLD: Number of Agricultural Households by Type of Household and District, 2002/03 Agriculture Year

District	Agriculture, Non Agriculture and Urban Households								
	Rural Household Involved in Agriculture	% of Total Rural Household	Rural Households NOT Involved in Agriculture	% of Total Rural Household	Total Rural Household	% of Total Rural Household	Urban Households	% of Total Urban Households	Total Number of Households (From 2002 Population Census)
	Number	%	Number	%	Number	%	Number	%	Number
Nzega	65,566	97.0	2,001	22.5	67,567	27.6	6,012	12.9	73,579
Igunga	45,141	96.2	1,771	19.9	46,912	19.2	4,264	9.2	51,176
Uyui	41,318	96.6	1,439	16.2	42,757	17.5	409	0.9	43,166
Urambo	54,120	95.1	2,800	31.4	56,920	23.2	5,713	12.3	62,633
Sikonge	19,514	97.7	466	5.2	19,980	8.2	2,269	4.9	22,249
Tabora Urban	10,258	96.1	421	4.7	10,679	4.4	27,887	59.9	38,566
Total	235,917	96.4	8,908	100.0	244,824	100.0	46,545	100.0	291,369

2.2 TYPE OF AGRICULTURE HOUSEHOLD: Number of Agriculture Households By Type of Holding and District, 2002/03 Agricultural Year

District	Type of Agriculture Household								Total Number of Agricultural Households Growing Crops	Total Number of Agricultural Households Rearing Livestock
	Crops Only		Livestock Only		Crops & Livestock		Total			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Nzega	37,921	26	0	0	27,645	32	65,566	28	65,566	27,645
Igunga	21,553	15	116	39	23,472	27	45,141	19	45,025	23,588
Uyui	26,559	18	105	36	14,653	17	41,318	18	41,212	14,758
Urambo	40,380	27	0	0	13,740	16	54,120	23	54,120	13,740
Sikonge	13,677	9	50	17	5,787	7	19,514	8	19,464	5,837
Tabora Urban	7,956	5	25	9	2,276	3	10,258	4	10,233	2,302
Total	148,046	100	296	100	87,575	100	235,917	100	235,621	87,871

NUMBER OF AGRICULTURE HOUSEHOLDS

3.0 HOUSEHOLDS DEMOGRAPHICS: Number of Agricultural Households and Average Household Size By Sex of the Head of Household and District, 2002/03 Agricultural Year

District	Male			Female			Total		
	Number of Households	%	Average Household Size	Number of Households	%	Average Household Size	Number of Households	%	Average Household Size
Nzega	54,327	83	6	11,239	17	3	65,566	100	5
Igunga	40,038	89	7	5,103	11	4	45,141	100	7
Uyui	35,609	86	7	5,708	14	5	41,318	100	7
Urambo	46,691	86	6	7,429	14	4	54,120	100	6
Sikonge	16,882	87	6	2,631	13	3	19,514	100	6
Tabora Urban	8,549	83	6	1,709	17	4	10,258	100	5
Total	202,097	86	6	33,820	14	4	235,917	100	6

RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES

Table 3.1 The Livelihood Activities/Source of Income of the Households Ranked in Order of Importance by District

District	Livelihood Activity						
	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	1	5	3	4	6	7	2
Igunga	1	5	4	2	6	7	3
Uyui	1	4	3	2	6	7	5
Urambo	1	5	4	2	6	7	3
Sikonge	1	5	2	3	6	7	4
Tabora Urban	1	4	3	2	6	7	5
Total	1	5	4	2	6	7	3

3.1a RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: First Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	58,722	601	1,952	3,004	718	296	138
Igunga	18,172	110	7,535	16,131	1,751	114	996
Uyui	35,913	0	404	3,485	505	0	801
Urambo	48,593	125	821	3,307	1,273	107	247
Sikonge	15,991	0	438	2,032	329	0	723
Tabora Urban	7,505	126	326	1,249	438	78	436
Total	184,896	962	11,476	29,208	5,014	596	3,340

3.1b RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Second Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	6,278	2,340	23,383	19,320	4,503	0	9,747
Igunga	22,496	627	10,573	7,580	1,304	0	3,018
Uyui	4,992	2,880	9,984	18,350	2,678	0	2,334
Urambo	4,797	5,084	10,962	23,948	2,252	466	6,270
Sikonge	3,182	781	5,435	5,601	776	142	3,591
Tabora Urban	2,396	1,051	1,414	3,485	490	13	1,228
Total	44,142	12,762	61,751	78,283	12,003	622	26,187

3.1c RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Third Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	426	3,944	10,453	13,602	4,464	136	27,639
Igunga	3,370	2,015	5,050	9,123	2,727	0	20,420
Uyui	307	5,137	9,280	8,018	1,656	0	2,837
Urambo	361	12,827	10,026	8,296	2,526	232	15,799
Sikonge	291	2,021	5,069	3,339	828	337	3,108
Tabora Urb	286	2,312	1,963	2,484	544	0	1,168
Total	5,041	28,256	41,840	44,863	12,745	705	70,971

3.1d RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Fourth Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	0	6,347	6,074	6,735	2,317	0	16,906
Igunga	773	5,083	2,997	4,859	2,161	110	16,197
Uyui	0	1,635	3,874	1,647	701	106	811
Urambo	0	6,905	5,801	2,080	1,093	327	19,025
Sikonge	49	1,486	2,802	1,485	489	148	1,688
Tabora Urban	0	2,038	1,686	940	123	51	413
Total	822	23,493	23,233	17,746	6,885	742	55,040

3.1e RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Fifth Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	0	4,465	1,754	750	1,113	0	4,123
Igunga	224	3,836	2,078	952	547	112	1,234
Uyui	0	100	208	701	301	106	0
Urambo	0	2,259	1,924	867	733	126	7,281
Sikonge	0	1,068	476	384	147	0	291
Tabora Urban	0	450	1,118	159	27	0	106
Total	224	12,178	7,559	3,813	2,868	344	13,035

3.1f RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Sixth Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Nzega	0	1,908	119	0	150	0	0
Igunga	0	115	109	0	110	0	0
Uyui	0	0	0	0	0	203	0
Urambo	0	121	487	125	473	0	853
Sikonge	0	0	146	43	49	0	0
Tabora Urban	0	49	54	0	27	0	27
Total	0	2,193	915	168	809	203	880

3.1g RANK OF IMPORTANCE OF LIVELIHOOD ACTIVITIES: Seventh Most Importance

District	Annual Crop Farming	Permanent Crop Farming	Livestock Keeping / Herding	Off Farm Income	Remittances	Fishing / Hunting & Gathering	Tree / Forest Resources
Igunga	0	0	110	0	0	0	0
Uyui	0	0	0	0	0	0	105
Urambo	120	0	0	0	0	0	0
Sikonge	0	0	0	0	0	50	50
Tabora Urb	0	0	27	0	0	0	0
Total	120	0	137	0	0	50	155

HOUSEHOLDS DEMOGRAPHYS

**3.2 HOUSEHOLDS DEMOGRAPHY: Number of
Agricultural Household Members By Sex and Age Group
for the 2002/03 Agricultural Year (row %)**

Age Group	Sex					
	Male		Female		Total	
	Number	%	Number	%	Number	%
Less than 4	97,618	51	92,435	49	190,053	100
05 - 09	121,677	51	114,599	49	236,276	100
10 - 14	105,672	54	91,793	46	197,465	100
15 - 19	84,870	55	70,772	45	155,643	100
20 - 24	57,246	47	64,992	53	122,237	100
25 - 29	53,708	47	60,021	53	113,729	100
30 - 34	43,396	50	42,548	50	85,944	100
35 - 39	35,393	54	30,611	46	66,004	100
40 - 44	28,093	53	24,554	47	52,647	100
45 - 49	19,436	47	21,691	53	41,127	100
50 - 54	18,516	52	17,093	48	35,608	100
55 - 59	15,504	51	14,624	49	30,128	100
60 - 64	13,585	48	14,514	52	28,099	100
65 - 69	13,941	60	9,131	40	23,073	100
70 - 74	9,608	50	9,539	50	19,147	100
75 - 79	7,796	68	3,634	32	11,430	100
80 - 84	4,414	61	2,841	39	7,255	100
Above 85	2,338	53	2,097	47	4,435	100
Total	732,811	52	687,489	48	1,420,300	100

**3.3 HOUSEHOLDS DEMOGRAPHY: Number of
Agricultural Household Members By Sex and Age Group
for the 2002/03 Agricultural Year (col %)**

Age Group	Sex					
	Male		Female		Total	
	Number	%	Number	%	Number	%
Less than 4	97,618	13	92,435	13	190,053	13
05 - 09	121,677	17	114,599	17	236,276	17
10 - 14	105,672	14	91,793	13	197,465	14
15 - 19	84,870	12	70,772	10	155,643	11
20 - 24	57,246	8	64,992	9	122,237	9
25 - 29	53,708	7	60,021	9	113,729	8
30 - 34	43,396	6	42,548	6	85,944	6
35 - 39	35,393	5	30,611	4	66,004	5
40 - 44	28,093	4	24,554	4	52,647	4
45 - 49	19,436	3	21,691	3	41,127	3
50 - 54	18,516	3	17,093	2	35,608	3
55 - 59	15,504	2	14,624	2	30,128	2
60 - 64	13,585	2	14,514	2	28,099	2
65 - 69	13,941	2	9,131	1	23,073	2
70 - 74	9,608	1	9,539	1	19,147	1
75 - 79	7,796	1	3,634	1	11,430	1
80 - 84	4,414	1	2,841	0	7,255	1
Above 85	2,338	0	2,097	0	4,435	0
Total	732,811	100	687,489	100	1,420,300	100

3.4 HOUSEHOLDS DEMOGRAPHICS: Number of Agricultural Household Members By Sex and District, 2002/03 Agricultural Year

District	Sex					
	Male		Female		Total	
	Number	%	Number	%	Number	%
Nzega	187,171	54	158,195	46	345,366	100
Igunga	157,202	51	153,059	49	310,261	100
Uyui	135,903	51	133,076	49	268,979	100
Urambo	168,695	51	159,259	49	327,955	100
Sikonge	56,742	50	56,159	50	112,900	100
Tabora Urban	27,098	49	27,741	51	54,839	100
Total	732,811	52	687,489	48	1,420,300	100

3.5 HOUSEHOLDS DEMOGRAPHICS: Number of Agriculture Household Members 5 years and above Who Can Read and Write Languages By Type of Language and District, 2002/03 Agricultural Year

District	Read & Write									
	Swahili		Swahili & English		Any Other Language		Don't Read / Write		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	134,146	42	11,184	4	136	0	170,905	54	316,371	100
Igunga	127,922	50	9,149	4	215	0	120,066	47	257,353	100
Uyui	111,264	47	9,758	4	300	0	112,963	48	234,284	100
Urambo	141,661	51	13,348	5	0	0	121,964	44	276,972	100
Sikonge	51,852	54	1,893	2	43	0	42,807	44	96,596	100
Tabora Urban	31,541	65	1,228	3	54	0	15,848	33	48,671	100
Total	598,385	49	46,560	4	748	0	584,554	48	1,230,247	100

3.6 HOUSEHOLDS DEMOGRAPHICS: Number of Agricultural Household Members 5 years and above By School Attendancy and District , 2002/03

District	School Attendancy							
	Attending		Completed		Never Attended		Total	
	Number	%	Number	%	Number	%	Number	%
Nzega	57,727	18	94,452	30	164,192	52	316,371	100
Igunga	55,993	22	84,604	33	116,756	45	257,353	100
Uyui	49,696	21	76,825	33	107,763	46	234,284	100
Urambo	66,043	24	97,841	35	113,088	41	276,972	100
Sikonge	16,951	18	39,365	41	40,280	42	96,596	100
Tabora Urban	12,700	26	20,449	42	15,521	32	48,671	100
Total	259,109	21	413,537	34	557,601	45	1,230,247	100

3.7 HOUSEHOLDS DEMOGRAPHICS: Number of Agricultural Household Members By Main Activity and District, 2002/03 Agricultural Year

District	Main Activity									
	Crop/Seaweed Farming		Livestock Keeping /		Livestock Pastoralist		Fishing		Government / Parastatal	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	194,747	62	13,916	4	136	0	146	0	1,403	0
Igunga	104,449	41	23,567	9	338	0	222	0	910	0
Uyui	130,995	56	5,783	2	310	0	211	0	713	0
Urambo	164,093	59	5,094	2	1,001	0	222	0	1,052	0
Sikonge	61,918	64	3,991	4	0	0	0	0	390	0
Tabora Urban	20,136	41	1,943	4	199	0	0	0	627	1
Total	676,338	55	54,294	4	1,984	0	802	0	5,095	0

Cont.... HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Main Activity and District, 2002/03 Agricultural Year

District	Main Activity									
	Private - NGO / Mission / etc		(Non Farming)		(Non Farming) without		Helper (Non Agriculture)		Not Working & Available	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	1,691	1	1,028	0	272	0	1,027	0	299	0
Igunga	1,968	1	663	0	12,566	5	1,290	1	444	0
Uyui	2,786	1	1,622	1	5,083	2	2,472	1	184	0
Urambo	1,996	1	734	0	1,218	0	1,070	0	326	0
Sikonge	198	0	490	1	393	0	764	1	99	0
Tabora Urban	473	1	148	0	7,203	15	52	0	697	1
Total	9,112	1	4,684	0	26,734	2	6,676	1	2,049	0

Cont.... HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Main Activity and District, 2002/03 Agricultural Year

District	Main Activity										Total	%
	Not Working & Unavailable		Housemaker / Housewife		Student		Unable to Work / Too Old / Retired / Sick / Disabled		Other			
	Number	%	Number	%	Number	%	Number	%	Number	%		
Nzega	0	0	6,016	2	52,014	16	40,187	13	3,490	1	316,371	100
Igunga	116	0	9,482	4	52,575	20	48,089	19	675	0	257,353	100
Uyui	317	0	1,210	1	43,676	19	38,503	16	418	0	234,284	100
Urambo	126	0	1,314	0	61,673	22	32,377	12	4,675	2	276,972	100
Sikonge	0	0	197	0	15,397	16	11,847	12	913	1	96,596	100
Tabora Urban	26	0	77	0	11,757	24	5,172	11	160	0	48,671	100
Total	585	0	18,296	1	237,091	19	176,175	14	10,331	1	1,230,247	100

3.8 HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Level of involvement in Farming Activity and District, 2002/03 Agricultural Year

District	Involvement in Farming									
	Works Full-time on Farm		Works Part-time on Farm		Rarely Works on Farm		Never Works on Farm		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	195,227	62	7,110	2	61,660	19	52,374	17	316,371	100
Igunga	114,990	45	7,672	3	79,772	31	54,919	21	257,353	100
Uyui	124,460	53	8,156	3	58,994	25	42,674	18	234,284	100
Urambo	161,836	58	5,255	2	64,371	23	45,511	16	276,972	100
Sikonge	62,408	65	3,901	4	14,186	15	16,101	17	96,596	100
Tabora Urban	19,269	40	5,663	12	16,694	34	7,045	14	48,671	100
Total	678,190	55	37,757	3	295,677	24	218,623	18	1,230,247	100

3.9 HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2002/03 Agricultural Year

District	Education Level									
	Under Standard One		Standard One		Standard Two		Standard Three		Standard Four	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	0	0	878	1	3,213	3	2,726	3	10,289	11
Igunga	224	0	228	0	1,132	1	1,466	2	6,476	8
Uyui	200	0	1,320	2	3,077	4	2,128	3	9,351	12
Urambo	1,099	1	600	1	2,600	3	4,069	4	11,318	12
Sikonge	50	0	434	1	1,263	3	1,444	4	4,012	10
Tabora Urban	27	0	523	3	670	3	973	5	2,446	12
Total	1,599	0	3,984	1	11,955	3	12,806	3	43,893	11

Cont....HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2002/03 Agricultural Year

District	Education Level									
	Standard Five		Standard Six		Standard Seven		Standard Eight		Training After	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	2,483	3	2,555	3	68,074	72	708	1	574	1
Igunga	2,112	2	1,812	2	66,602	79	887	1	562	1
Uyui	1,921	2	2,937	4	50,751	66	1,536	2	103	0
Urambo	4,454	5	4,258	4	63,770	65	357	0	124	0
Sikonge	672	2	877	2	28,387	72	439	1	292	1
Tabora Urban	748	4	748	4	12,612	62	633	3	37	0
Total	12,389	3	13,186	3	290,195	70	4,560	1	1692	0

Cont.... HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2002/03 Agricultural Year

District	Education Level									
	Pre Form One		Form One		Form Two		Form Three		Form Four	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	0	0	119	0	445	0	291	0	1,536	2
Igunga	0	0	0	0	109	0	109	0	973	1
Uyui	0	0	310	0	504	1	0	0	1,537	2
Urambo	0	0	0	0	349	0	375	0	1,845	2
Sikonge	148	0	95	0	244	1	46	0	913	2
Tabora Urban	27	0	52	0	103	1	25	0	416	2
Total	175	0	576	0	1756	0	847	0	7,220	2

Cont.... HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Household Members By Level of Formal Education Completion and District, 2002/03 Agricultural Year

District	Education Level									
	Form Six		Training After Secondary		University & Other		Adult Education		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Nzega	0	0	147	0	124	0	290	0	94,452	100
Igunga	330	0	204	0	0	0	1,378	2	84,604	100
Uyui	208	0	0	0	0	0	942	1	76,825	100
Urambo	0	0	126	0	0	0	2,497	3	97,841	100
Sikonge	0	0	0	0	0	0	49	0	39,365	100
Tabora Urban	27	0	0	0	27	0	355	2	20,449	100
Total	566	0	476	0	151	0	5,511	1	413,537	100

3.10 HOUSEHOLDS DEMOGRAPHYS: Number of Agricultural Households and Average Household Size By Sex of the Head of Household and District, 2002/03 Agricultural Year

District	Male			Female			Total		
	Number	%	Average Household Size	Number	%	Average Household Size	Number	%	Average Household Size
Nzega	54327	83	6	11239	17	3	65566	100	5
Igunga	40038	89	7	5103	11	4	45141	100	7
Uyui	35609	86	7	5708	14	5	41318	100	7
Urambo	46691	86	6	7429	14	4	54120	100	6
Sikonge	16882	87	6	2631	13	3	19514	100	6
Tabora Urban	8549	83	6	1709	17	4	10258	100	5
Total	202097	86	6	33820	14	4	235917	100	6

3.11 HOUSEHOLD DEMOGRAPHYS: Number of Agricultural Households by Number of Household Members with Off-farm Income Generating Activities and District, 2002/03 Agricultural Year

District	Off farm income							
	One		Two		More than Two		Total	
	Number	%	Number	%	Number	%	Number	%
Nzega	26,082.13	43	18,726.87	31	16,469.31	27	61,278.31	100
Igunga	23,285.70	55	10,971.36	26	8,205.83	19	42,462.89	100
Uyui	24,801.56	78	4,545.28	14	2,431.98	8	31,778.82	100
Urambo	28,648.95	59	12,552.49	26	6,983.64	14	48,185.08	100
Sikonge	8,709.02	60	3,459.75	24	2,240.38	16	14,409.15	100
Tabora Urb	5,925.18	67	2,028.46	23	831.00	9	8,784.64	100
Total	117,452.54	57	52,284.21	25	37,162.14	18	206,898.89	100

3.12 HOUSEHOLDS DEMOGRAPHYS: Number of Heads of Agricultural Households By Maximum Education Level Attained and District, 2002/03 Agricultural Year

District	Maximum Education Level Attained							Adult Education	Total
	No Education	Primary Education	Post Primary Education	Secondary Education	Post Secondary Education	University & Equivalent Education			
Nzega	32,985	30,197	300	1,383	147	124	431	65,566	
Igunga	21,763	22,085	340	450	94	0	409	45,141	
Uyui	15,801	23,665	103	1,223	0	0	526	41,318	
Urambo	18,012	32,915	124	1,516	126	0	1,427	54,120	
Sikonge	6,018	12,610	98	740	0	0	49	19,514	
Tabora Urban	3,190	6,393	13	412	0	27	224	10,258	
Total	97,767	127,864	979	5,724	367	151	3,066	235,917	

3.13 HOUSEHOLDS DEMOGRAPHYS: Mean, Median, Mode of Age of Head of Agricultural Household and District

District	Male			Female			Total		
	Mean	Median	Mode	Mean	Median	Mode	Mean	Median	Mode
Nzega	47.39448261	45	60	54.28974015	54	50	48.57643073	48	60
Igunga	45.7464136	42	40	51.20685666	49	55	46.36371093	43	40
Uyui	45.40639926	42	30	52.5523658	52	70	46.39364742	44	30
Urambo	43.54515626	40	35	49.0763008	50	55	44.30442272	41	40
Sikonge	43.07979649	40	30	50.72944103	49	45	44.11132617	41	30
Tabora Urb	48.88210258	48	65	52.06704642	52	50	49.41278829	49	65
Total	45.5308498	42	30	51.99676421	52	70	46.45777754	44	30

3.14 Time Series of Male and Female Headed Households

Type of Holding	NSCA 1994/95	EAS 1995/96	EAS 1996/97	IAS 1997/98	DIAS 1998/99	NSCA 2002/03
Male Headed (Number in Thousands)	151	159	158	175	174	209
Female Headed (Number in Thousands)	25	34	36	32	29	52
Total	176	193	194	207	203	261
Male Headed (Percentage)	86	82	81	84	86	80
Female Headed (Percentage)	14	18	19	16	14	20
Total	100	100	100	100	100	100

3.15 Literacy Rates of Heads of Households by Sex and District

District	Literacy								
	Know			Don't Know			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nzega	28867	3715	32582	25460	7524	32985	54,327	11,239	65,566
Igunga	22287	1315	23602	17751	3788	21539	40,038	5,103	45,141
Uyui	24097	1522	25618	11513	4186	15699	35,609	5,708	41,318
Urambo	33820	2757	36577	12871	4672	17543	46,691	7,429	54,120
Sikonge	11838	1658	13496	5044	974	6018	16,882	2,631	19,514
Tabora Urban	6487	581	7068	2062	1128	3190	8,549	1,709	10,258
Total	127396	11548	138944	74701	22272	96973	202,097	33,820	235,917

LAND ACCESS/OWNERSHIP

4.1 LAND ACCESS/OWNERSHIP: Number of Agricultural Households By Type of Land Ownership/Tenure and District, 2002/03 Agricultural Year

District	Land Access														Total Number of Households
	Households with Area Leased/Certificate of Ownership	%	Households with Area Owned Under Customary Law	%	Households with Area Bought From Others	%	Households with Area Rented From Others	%	Households with Area Borrowed From Others	%	Households with Area Shared Cropped From Others	%	Households with Area under Other Forms of Tenure	%	
Nzega	150	0	55,082	84	13,660	21	4,482	7	4,400	7	585	1	1,008	2	65,566
Igunga	1,437	3	33,952	75	10,720	24	10,393	23	4,139	9	2,265	5	1,344	3	45,141
Uyui	909	2	28,668	69	11,291	27	3,011	7	5,011	12	616	1	1,675	4	41,318
Urambo	1,546	3	39,267	73	11,302	21	3,413	6	6,455	12	477	1	2,961	5	54,120
Sikonge	341	2	16,462	84	2,398	12	830	4	1,762	9	99	1	615	3	19,514
Tabora Urban	674	7	8,346	81	2,016	20	577	6	630	6	113	1	244	2	10,258
Total	5,057	2	181,777	77	51,387	22	22,706	10	22,397	9	4,155	2	7,847	3	235,917

4.2 LAND ACCESS/OWNERSHIP: Area of Land by type of Ownership/Tenure (Hectare) and District, 2002/03 Agricultural Year

District	Land Access/ Ownership (Hectare)							
	Area Leased/Certificate of Ownership	Area Owned Under Customary Law	Area Bought From Others	Area Rented From Others	Area Borrowed From Others	Area Shared Cropped From Others	Area under Other Forms of Tenure	Total
Nzega	213	116,954	22,792	2,620	2,539	179	611	145,908
Igunga	3,681	126,635	35,872	15,382	6,634	3,853	1,021	193,077
Uyui	5,193	130,792	37,005	4,406	5,781	1,470	3,447	188,093
Urambo	4,078	171,784	49,247	5,171	6,405	1,644	13,350	251,678
Sikonge	1,285	69,040	9,810	1,246	1,955	241	2,597	86,174
Tabora Urb	1,497	25,164	5,666	826	629	235	300	34,318
Total	15,946	640,369	160,392	29,651	23,943	7,622	21,326	899,248

LAND USE

5.1 LAND USE: Number of Agricultural Households By Type of Land Use and District for the 2002/03 Agricultural Year

District	Land Use												Total Number of Households
	Households with Temporary Mono Crops	Households with Temporary Mixed Crops	Households with Permanent Mono Crops	Households with Permanent Mixed Crops	Households with Permanent / Annual Mix	Households with Pasture	Households with Fallow	Households with Natural Bush	Households with Planted Trees	Households Renting to Others	Households with Unusable Land	Households with Uncultivated Usable Land	
Nzega	51,560	39,574	7,994	1,898	5,295	124	9,862	738	676	882	3,284	15,156	65,566
Igunga	40,335	19,440	1,284	1,349	1,356	5,977	2,066	749	114	1,919	1,774	10,258	45,141
Uyui	31,741	27,979	5,696	1,933	2,707	3,479	8,536	3,283	822	1,320	3,557	19,013	41,318
Urambo	42,042	29,079	11,415	2,309	9,542	2,959	15,591	12,325	876	1,328	7,253	18,972	54,120
Sikonge	13,358	13,330	3,470	484	1,060	1,112	4,162	2,266	288	291	625	7,601	19,514
Tabora Urban	7,066	7,730	4,013	659	1,659	497	2,473	736	79	186	775	5,155	10,258
Total	186,102	137,132	33,871	8,631	21,619	14,147	42,690	20,096	2,855	5,927	17,268	76,155	235,917

5.2 LAND USE: Area of Land (Ha) by type of Land Use and District during 2002/03 Agricultural Year

District	Land Use Area												Total
	Area under Temporary Mono Crops	Area under Temporary Mixed Crops	Area under Permanent Mono Crops	Area under Permanent Mixed Crops	Area under Permanent / Annual Mix	Area under Pasture	Area under Fallow	Area under Natural Bush	Area under Planted Trees	Area Rented to Others	Area Unusable	Area of Uncultivated Usable Land	
Nzega	61,148	44,348	3,144	636	4,578	125	12,225	512	131	1,126	4,406	13,528	145,908
Igunga	113,001	27,521	327	2,970	4,315	16,095	3,319	1,592	46	5,710	4,851	13,330	193,077
Uyui	57,360	43,216	2,484	2,609	3,194	7,704	12,261	11,085	606	2,280	8,076	37,219	188,093
Urambo	73,930	36,474	5,904	2,636	10,490	6,589	25,353	41,471	2,241	688	13,910	31,968	251,655
Sikonge	24,826	22,518	1,310	414	1,652	2,012	5,930	7,130	188	388	1,433	18,373	86,174
Tabora Urban	6,053	8,716	2,009	871	1,688	739	2,928	1,283	24	361	1,087	8,560	34,318
Total	336,318	182,793	15,179	10,136	25,917	33,264	62,016	63,072	3,237	10,553	33,763	122,977	899,225

5.3 LAND SUFFICIENCY: Number of Agricultural Households by Whether All Land Available to the Household Was Used and District, 2002/03 Agricultural Year

District	Was all Land Available to the Hh Used During 2002/03?				
	Yes		No		Total
	Number	%	Number	%	
Nzega	40,492	62	25,074	38	65,566
Igunga	28,055	62	16,970	38	45,025
Uyui	13,245	32	27,968	68	41,212
Urambo	14,588	27	39,532	73	54,120
Sikonge	6,808	35	12,656	65	19,464
Tabora Urban	3,372	33	6,861	67	10,233
Total	106,559	45	129,061	55	235,621

5.4 LAND SUFFICIENCY: Number of Agricultural Households by Whether they Consider Having Sufficient Land for the Household and District during 2002/03 Agricultural Year

District	Do you Consider that you have sufficient land for the Hh?				
	Yes		No		Total
	Number	%	Number	%	
Nzega	40,042	61	25,524	39	65,566
Igunga	21,242	47	23,783	53	45,025
Uyui	27,506	67	13,706	33	41,212
Urambo	36,872	68	17,248	32	54,120
Sikonge	13,666	70	5,799	30	19,464
Tabora Urban	7,819	76	2,413	24	10,233
Total	147,147	62	88,474	38	235,621

5.5 LAND SUFFICIENCY: Number of Agricultural Households by whether Female Members of the Household Own or Have Customary Right to Land and District, 2002/03 Agricultural Year

District	Do any Female Members of the Hh own or have				
	Yes		No		Total
	Number	%	Number	%	
Nzega	10,308	16	55,258	84	65,566
Igunga	2,223	5	42,802	95	45,025
Uyui	4,076	10	37,137	90	41,212
Urambo	4,245	8	49,875	92	54,120
Sikonge	2,827	15	16,637	85	19,464
Tabora Urban	1,009	10	9,224	90	10,233
Total	24,688	10	210,933	90	235,621

ANNUAL CROP & VEGETABLE PRODUCTION - LONG RAIN SEASON

7.1a ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Area Planted (ha) By District - LONG RAINY SEASON

District	Number of Households	Planted Area (hectare)
Nzega	65,566	109,322
Igunga	45,141	142,453
Uyui	41,318	95,654
Urambo	54,120	114,863
Sikonge	19,514	52,716
Tabora Urban	10,258	17,606
Total	235,917	532,615

7.1b ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households Planting Crops By Season and District-LONG RAINY SEASON

District	Long Rainy Season		
	Number of Households Growing Crops	Number of Households NOT Growing Crops	Total Number of Crop Growing Households
	Number	Number	Number
Nzega	65,428	138	65,566
Igunga	45,025	116	45,141
Uyui	41,212	105	41,318
Urambo	54,120	0	54,120
Sikonge	19,464	50	19,514
Tabora Urban	10,206	52	10,258
Total	235,456	461	235,917

7.1c CROP AND VEGETABLE PRODUCTION: Area Planted (ha) and Quantity Harvested by Season and Crop for the Year 2002/03 Agriculture Year, Tabora Region

Crop	Long Rainy Season		
	Planted area (ha)	Quantity Harvested (tons)	Yield (kg/ha)
CEREALS	347455	222315	
Maize	232860	143122	615
Paddy	65657	58661	893
Sorghum	46379	18959	409
Bulrush Millet	1545	700	453
Finger Millet	881	769	873
Wheat	33	15	468
Barley	100	89	889
ROOTS & TUBERS	31535	41380	
Cassava	21391	28416	1328
Sweet Potatoes	9173	12351	1346
Irish Potatoes	723	329	455
Yams	248	283	1143
PULSES	25911	9659	
Mung Beans	66	19	295
Beans	19331	7143	370
Cowpeas	1802	544	302
Green Gram	436	91	209
Chich Peas	682	437	640
Bambaranuts	3593	1424	396
OIL SEEDS & OIL NUTS	69862	31877	456
Sunflower	510	149	292
Simsim	548	94	172
Groundnuts	68730	31618	460
Soya Beans	75	16	211
FRUITS & VEGETABLES	2904	5847	
Okra	21	31	1469
Radish	283	419	1480
Turmeric	0	0	0
Bitter Aubergine	97	85	872
Garlic	0	0	0
Onions	1507	2550	1692
Ginger	5	13	2371
Cabbage	48	55	1140
Tomatoes	827	2522	3048
Chillies	1	7	5558
Amaranths	60	98	1632
Pumpkins	38	53	1408
Cucumber	3	2	790
Egg Plant	12	11	865
CASH CROPS	54948	39604	
Seaweed	0	0	0
Cotton	22409	9932	443
Tobacco	32490	29613	911
Pyrethrum	49	58	1186
Jute	0	1	3088
Total	532615		

7.1d CROP AND VEGETABLE PRODUCTION: Number of Agriculture Household by Area Planted (ha) and Crop for the Agriculture Year 2002/03 Agriculture Year, Tabora Region

Crop	Long Rainy Season		
	Number of Households	Planted area (ha)	Area Planted per Household (ha/hh)
CEREALS	353280	347455	
Maize	229901	232860	1.0
Paddy	92037	65657	0.7
Sorghum	28207	46379	1.6
Bulrush Millet	554	1545	2.8
Finger Millet	2311	881	0.4
Wheat	221	33	0.1
Barley	49	100	2.0
ROOTS & TUBERS	77055	31535	
Cassava	47395	21391	0.5
Sweet Potatoes	27635	9173	0.3
Irish Potatoes	1193	723	0.6
Yams	832	248	0.3
PULSES	79687	25911	
Mung Beans	163	66	0.4
Beans	56189	19331	0.3
Cowpeas	7792	1802	0.2
Green Gram	2015	436	0.2
Chich Peas	948	682	0.7
Bambaranuts	12580	3593	0.3
OIL SEEDS & OIL NUTS	146161	69862	
Sunflower	1525	510	0.3
Simsim	976	548	0.6
Groundnuts	143462	68730	0.5
Soya Beans	198	75	0.4
FRUITS & VEGETABLES	10815	2904	
Okra	76	21	0.3
Radish	258	283	1.1
Bitter Aubergine	240	97	0.4
Onions	3250	1507	0.5
Ginger	27	5	0.2
Cabbage	246	48	0.2
Tomatoes	5471	827	0.2
Chillies	25	1	0.0
Amaranths	568	60	0.1
Pumpkins	476	38	0.1
Cucumber	26	3	0.1
Egg Plant	150	12	0.1
CASH CROPS	44413	54948	
Cotton	13395	22409	1.7
Tobacco	30946	32490	1.0
Pyrethrum	48	49	1.0
Jute	24	0	0.0
Total	711411	532615	

7.1e ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area (ha) By Means of Soil Preparation and District During 2002/03 Crop Year-LONG RAINY SEASON, Tabora Region

District	Soil Preparation							
	Mostly Tractor Ploughing		Mostly Oxen Ploughing		Mostly Hand Cultivation		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	571	1,353	29,292	64,739	35,566	38,842	65,428	104,934
Igunga	901	1,875	37,154	129,795	6,970	10,112	45,025	141,782
Uyui	412	749	8,794	31,866	32,007	59,899	41,212	92,515
Urambo	126	115	4,950	15,290	49,043	90,783	54,120	106,188
Sikonge	589	983	3,041	18,060	15,835	31,873	19,464	50,916
Tabora Urban	51	42	670	1,888	9,485	13,391	10,206	15,321
Total	2,650	5,117	83,901	261,638	148,905	244,900	235,456	511,655
%	0.5	1.0	16.4	51.1	29.1	47.9	46.0	100.0

7.1f ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area By Fertilizer Use and District for the 2002/03 Crop Year-LONG RAINY SEASON

District	Fertilizer Use									
	Mostly Farm Yard		Mostly Compost		Mostly Inorganic		No Fertilizer Applied		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	12,860	24,016	3,087	6,515	1,413	3,154	48,206	75,637	65,566	109,322
Igunga	3,998	8,517	460	1,792	862	3,136	39,705	129,008	45,025	142,453
Uyui	3,850	12,907	1,124	1,993	8,428	24,771	27,811	55,984	41,212	95,654
Urambo	3,102	9,090	1,364	1,549	13,908	38,531	35,746	65,694	54,120	114,863
Sikonge	1,943	8,234	47	66	5,258	15,973	12,217	28,443	19,464	52,716
Tabora Urb	1,228	2,843	160	258	2,197	4,618	6,622	9,888	10,206	17,606
Total	26,982	65,605	6,240	12,173	32,066	90,184	170,306	364,654	235,594	532,615

7.1g ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area By Irrigation Use and District for the 2002/03 Crop Year - LONG RAINY SEASON

District	Irrigation Use						% of Area Planted Under Irrigation
	Households Using Irrigation		Households Not Using Irrigation		Total		
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area	
Nzega	10,673	23,021	54,893	86,301	65,566	109,322	21.1
Igunga	3,227	8,425	41,799	134,028	45,025	142,453	5.9
Uyui	6,708	14,011	34,505	81,643	41,212	95,654	14.6
Urambo	12,546	24,666	41,574	90,197	54,120	114,863	21.5
Sikonge	2,540	11,910	16,924	40,805	19,464	52,716	22.6
Tabora Urban	3,009	6,457	7,197	11,149	10,206	17,606	36.7
Total	38,702	88,491	196,892	444,124	235,594	532,615	16.6

7.1h ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing and Planted Area By Insecticide Use and District for the 2002/03 Crop Year - LONG RAINY SEASON

District	Insecticide Use					
	Households Using Pesticide		Households Not Using Pesticide		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	5,747	12,895	59,819	96,428	65,566	109,322
Igunga	6,710	32,343	38,315	110,111	45,025	142,453
Uyui	12,766	39,897	28,447	55,758	41,212	95,654
Urambo	18,095	52,083	36,025	62,780	54,120	114,863
Sikonge	6,670	23,218	12,795	29,498	19,464	52,716
Tabora Urb	3,939	8,474	6,267	9,133	10,206	17,606
Total	53,927	168,908	181,667	363,707	235,594	532,615

7.1i ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area By Herbicide Use and District During 2002/03 Crop Year LONG RAINY SEASON

District	Herbicide Use					
	Households Using Herbicide		Households Not Using Herbicide		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	601	1,350	64,965	107,973	65,566	109,322
Igunga	569	1,544	44,456	140,909	45,025	142,453
Uyui	726	1,882	40,486	93,772	41,212	95,654
Urambo	2,568	7,520	51,552	107,343	54,120	114,863
Sikonge	99	542	19,365	52,174	19,464	52,716
Tabora Urb	287	492	9,919	17,114	10,206	17,606
Total	4,850	13,330	230,744	519,285	235,594	532,615

7.1j ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area By Fungicide Use and District During 2002/03 Crop Year LONG RAINY SEASON

District	Fungicide Use					
	Households Using Fungicide		Households Not Using Fungicide		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	900	3,249	64,666	106,073	65,566	109,322
Igunga	1,589	7,215	43,436	135,238	45,025	142,453
Uyui	1,565	4,017	39,648	91,637	41,212	95,654
Urambo	6,436	17,503	47,684	97,361	54,120	114,863
Sikonge	1,134	4,185	18,331	48,531	19,464	52,716
Tabora Urb	620	1,510	9,586	16,096	10,206	17,606
Total	12,244	37,680	223,350	494,935	235,594	532,615

7.1k ANNUAL CROP AND VEGETABLE PRODUCTION: Number of Crop Growing Households and Planted Area By Improved Seed Use and District During 2002/03 Crop Year - LONG RAINY SEASON

District	Improved Seed Use					
	Households Using Improved Seed		Households Not Using Improved Seed		Total	
	No. of H/holds	Planted Area	No. of H/holds	Planted Area	No. of H/holds	Planted Area
Nzega	4,630	7,588	60,799	97,346	65,428	104,934
Igunga	3,815	17,066	41,210	124,716	45,025	141,782
Uyui	6,237	19,024	34,976	73,490	41,212	92,515
Urambo	12,950	31,224	41,170	74,964	54,120	106,188
Sikonge	3,057	10,548	16,407	40,368	19,464	50,916
Tabora Urban	1,788	2,675	8,418	12,646	10,206	15,321
Total	32,477	88,125	202,980	423,530	235,456	511,655

7.2a Number of Crop Producing Households Reporting Selling Agricultural Produce by District; 2003/04 Agriculture Year

District	Households that Sold Produce		Households that Did not Sell Produce		Total Number of Households
	Number	%	Number	%	
Nzega	27633	42	37933	58	65566
Igunga	21622	48	23519	52	45141
Uyui	21884	53	19434	47	41318
Urambo	43449	80	10671	20	54120
Sikonge	12147	62	7367	38	19514
Tabora Urban	4669	46	5589	54	10258
Total	131403	56	104514	44	235917

7.2b ANNUAL CROP & VEGETABLE PRODUCTION: Planted Area and Number of Crop Growing Households During the Long Rainy Season by Method of Land Clearing and Crop; 2002/03 Agriculture Year

Crop	Land Clearing													
	Mostly Bush Clearance		Mostly Hand Slashing		Mostly Tractor Slashing		Mostly Burning		No Land Clearing		Other		Total	
	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area	Number of Households	Planted Area
CEREALS		29743		303639		1124		5669		5594		122		345891
Maize	18,660	20,329	204,004	205,806	670	795	2,110	1,758	3,352	3,152	150	122	228,946	231,963
Paddy	5,347	5,607	77,445	53,189	256	73	4,889	3,708	3,656	2,442	0	0	91,592	65,020
Sorghum	3,034	3,807	24,805	42,268	114	231	108	44	0	0	0	0	28,060	46,349
Bulrush Millet	0	0	554	1,545	0	0	0	0	0	0	0	0	554	1,545
Finger Millet	0	0	1,702	697	125	25	484	159	0	0	0	0	2,311	881
Wheat	0	0	221	33	0	0	0	0	0	0	0	0	221	33
Barley	0	0	49	100	0	0	0	0	0	0	0	0	49	100
ROOTS & TUBERS		1,356		8,670		125		115		309		0		10,575
Cassava	0	0	1,429	431	0	0	0	0	0	0	0	0	1,429	431
Sweet Potatoes	4,038	1,274	21,780	7,397	232	103	222	90	1,362	309	0	0	27,635	9,173
Irish Potatoes	145	59	940	642	109	22	0	0	0	0	0	0	1,193	723
Yams	114	23	595	200	0	0	123	25	0	0	0	0	832	248
Cocoyam	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PULSES	5,899	2,397	71,672	22,533	267	69	1,198	696	624	195	0	0	79,661	25,889
Mung Beans	114	46	49	20	0	0	0	0	0	0	0	0	163	66
Beans	3,215	1,347	51,280	17,127	267	69	1,198	696	229	93	0	0	56,189	19,331
Cowpeas	969	305	6,728	1,465	0	0	0	0	95	32	0	0	7,792	1,802
Green Gram	476	129	1,539	307	0	0	0	0	0	0	0	0	2,015	436
Pigeon Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chich Peas	0	0	948	682	0	0	0	0	0	0	0	0	948	682
Bambaranuts	1,125	569	11,128	2,933	0	0	0	0	300	70	0	0	12,553	3,571
Field Peas	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OIL SEEDS & OIL NUTS		6,010		61,568		3		572		1,169		0		69,320
Sunflower	341	116	1,184	394	0	0	0	0	0	0	0	0	1,525	510
Simsim	244	94	732	453	0	0	0	0	0	0	0	0	976	548
Groundnuts	11,082	5,800	127,899	60,645	27	3	1,075	572	2,727	1,169	0	0	142,810	68,188
Soya Beans	0	0	198	75	0	0	0	0	0	0	0	0	198	75
Castor Seed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRUITS & VEGETABLES		439		2,407		21		22		15		0		2,904
Okra	50	20	27	1	0	0	0	0	0	0	0	0	76	21
Radish	149	261	0	0	0	0	109	22	0	0	0	0	258	283
Turmeric	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bitter Aubergine	0	0	240	97	0	0	0	0	0	0	0	0	240	97
Garlic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Onions	741	110	2,359	1,381	0	0	0	0	150	15	0	0	3,250	1,507
Ginger	0	0	27	5	0	0	0	0	0	0	0	0	27	5
Cabbage	0	0	246	48	0	0	0	0	0	0	0	0	246	48
Tomatoes	242	46	5,052	760	177	21	0	0	0	0	0	0	5,471	827
Spinnach	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrot	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chillies	0	0	25	1	0	0	0	0	0	0	0	0	25	1
Amaranths	26	1	542	60	0	0	0	0	0	0	0	0	568	60
Pumpkins	27	1	449	37	0	0	0	0	0	0	0	0	476	38
Cucumber	0	0	26	3	0	0	0	0	0	0	0	0	26	3
Egg Plant	0	0	150	12	0	0	0	0	0	0	0	0	150	12
Water Mellon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cauliflower	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CASH CROPS		6,929		47,710		181		67		20		0		54,908
Seaweed	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cotton	1,909	2,252	11,262	19,951	114	139	110	67	0	0	0	0	13,395	22,409
Tobacco	3,970	4,677	26,772	27,710	106	43	0	0	50	20	0	0	30,897	32,450
Pyrethrum	0	0	48	49	0	0	0	0	0	0	0	0	48	49
Jute	0	0	24	0	0	0	0	0	0	0	0	0	24	0
Total		46,875		446,526		1,523		7,140		7,302		122		509,488

7.2.1 Number of Households by Planted Area (ha) and Quantity of Maize Harvested (tons) by District and Crop-Long Rainy Season

District	Maize			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	64,428	52,986	36,466	0.7
Igunga	42,764	56,579	18,821	0.3
Uyui	40,700	46,418	28,017	0.6
Urambo	52,445	46,076	37,839	0.8
Sikonge	19,375	22,958	17,841	0.8
Tabora Urban	10,189	7,844	4,138	0.5
Total	229,901	232,860	143,122	0.6

7.2.2 Number of Households by Planted Area (ha) and Quantity of Paddy Harvested (tons) by District and Crop-Long Rainy Season

	Paddy			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	36,736	25,289	22,484	0.9
Igunga	10,553	6,560	7,924	1.2
Uyui	17,627	14,587	13,713	0.9
Urambo	17,943	11,904	10,422	0.9
Sikonge	4,627	5,193	2,470	0.5
Tabora Urban	4,551	2,124	1,648	0.8
Total	92,037	65,657	58,661	0.9

7.2.3 Number of Households by Planted Area (ha) and Quantity of Sorghum Harvested (tons) by District and Crop-Long Rainy Season

	Sorghum			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	2,176	1,347	712	0.5
Igunga	20,424	38,804	15,621	0.4
Uyui	2,899	3,162	1,660	0.5
Urambo	1,152	345	100	0.3
Sikonge	1,381	2,665	850	0.3
Tabora Urban	176	57	15	0.3
Total	28,207	46,379	18,959	0.4

7.2.5 Number of Households by Planted Area (ha) and Quantity of Bulrush Millet Harvested (tons) by District and Crop-Long Rainy Season

District	Bulrush Millet			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	97	39	29	0.7
Urambo	115	70	5	0.1
Sikonge	341	1,436	666	0.5
Tabora Urban	0	0	0	0.0
Total	554	1,545	700	0.5

7.2.4 Number of Households by Planted Area (ha) and Quantity of Finger Millet Harvested (tons) by District and Crop-Long Rainy Season

	Finger Millet			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	432	98	152	1.6
Igunga	0	0	0	0.0
Uyui	106	43	76	1.8
Urambo	1,726	722	513	0.7
Sikonge	48	19	28	1.5
Tabora Urban	0	0	0	0.0
Total	2,311	881	769	0.9

7.2.6 Number of Households by Planted Area (ha) and Quantity of Bulrush Millet Harvested (tons) by District and Crop-Long Rainy Season

District	Barley			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	49	100	89	0.9
Tabora Urban	0	0	0	0.0
Total	49	100	89	0.9

7.2.7 Number of Households by Planted Area (ha) and Quantity of Bulrush Millet Harvested (tons) by District and Crop-Long Rainy Season

District	Wheat			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	119	12	0	0.0
Igunga	0	0	0	0.0
Uyui	102	21	15	0.7
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	0	0	0	0.0
Total	221	33	15	0.5

7.2.8 Number of Households by Planted Area (ha) and Quantity of Cassava Harvested (tons) by District and Crop-Long Rainy Season

District	Cassava			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	10,904	4,388	4,024	0.9
Igunga	2,088	736	1,114	1.5
Uyui	7,176	3,316	3,115	0.9
Urambo	19,146	8,795	16,274	1.9
Sikonge	3,906	1,829	2,062	1.1
Tabora Urban	4,175	2,326	1,827	0.8
Total	47,395	21,391	28,416	1.3

7.2.9 Number of Households by Planted Area (ha) and Quantity of Sweet Potatoes Harvested (tons) by District and Crop-Long Rainy Season

District	Sweet Potatoes			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	1,602	673	490	0.7
Igunga	11,500	3,639	2,590	0.7
Uyui	4,234	1,440	3,715	2.6
Urambo	5,546	1,483	3,396	2.3
Sikonge	2,299	1,166	923	0.8
Tabora Urban	2,453	772	1,237	1.6
Total	27,635	9,173	12,351	1.3

7.2.10 Number of Households by Planted Area (ha) and Quantity of Irish Potatoes Harvested (tons) by District and Crop-Long Rainy Season

District	Irish Potatoes			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	444	112	81	0.7
Uyui	105	21	17	0.8
Urambo	618	579	218	0.4
Sikonge	0	0	0	0.0
Tabora Urban	27	11	13	1.2
Total	1,193	723	329	0.5

7.2.11 Number of Households by Planted Area (ha) and Quantity of Irish Potatoes Harvested (tons) by District and Crop-Long Rainy Season

District	Yams			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	419	129	247	1.9
Igunga	114	23	3	0.1
Uyui	0	0	0	0.0
Urambo	123	25	0	0.0
Sikonge	149	60	25	0.4
Tabora Urban	27	11	9	0.8
Total	832	248	283	1.1

7.2.12 Number of Households by Planted Area (ha) and Quantity of Beans Harvested (tons) by District and Crop-Long Rainy Season

District	Beans			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	6612	1064	300	0.3
Igunga	451	319	493	1.5
Uyui	10854	3654	912	0.2
Urambo	26666	10308	4318	0.4
Sikonge	6669	2547	870	0.3
Tabora Urban	4936	1439	250	0.2
Total	56189	19331	7143	0.4

7.2.13 Number of Households by Planted Area (ha) and Quantity of Bambaranuts Harvested (tons) by District and Crop-Long Rainy Season

District	Bambaranuts			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	5487	1353	691	0.5
Igunga	1903	659	112	0.2
Uyui	2020	782	305	0.4
Urambo	1324	294	103	0.3
Sikonge	918	327	133	0.4
Tabora Urban	928	177	81	0.5
Total	12580	3593	1424	0.4

7.2.14 Number of Households by Planted Area (ha) and Quantity of Cowpeas Harvested (tons) by District and Crop-Long Rainy Season

District	Cowpeas			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	2,024	560	135	0.2
Igunga	1,306	187	62	0.3
Uyui	1,125	236	76	0.3
Urambo	1,852	444	169	0.4
Sikonge	713	245	55	0.2
Tabora Urban	772	130	47	0.4
Total	7,792	1,802	544	0.3

7.2.15 Number of Households by Planted Area (ha) and Quantity of Chick Peas Harvested (tons) by District and Crop-Long Rainy Season

District	Chich Peas			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	150	16	9	0.6
Igunga	798	667	428	0.6
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	0	0	0	0.0
Total	948	682	437	0.6

7.2.16 Number of Households by Planted Area (ha) and Quantity of Green Gram Harvested (tons) by District and Crop-Long Rainy Season

District	Green Gram			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	450	86	12	0.1
Uyui	407	85	10	0.1
Urambo	1101	258	68	0.3
Sikonge	43	1	1	0.6
Tabora Urb	13	6	1	0.1
Total	2015	436	91	0.2

7.2.17 Number of Households by Planted Area (ha) and Quantity of Mung Beans Harvested (tons) by District and Crop-Long Rainy Season

District	Mung Beans			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	114	46	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	49	20	19	1.0
Tabora Urban	0	0	0	0.0
Total	163	66	19	0.3

7.2.18 Number of Households by Planted Area (ha) and Quantity of Groundnuts Harvested (tons) by District and Crop-Long Rainy Season

District	Groundnuts			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	46,773	19,722	9,820	0.5
Igunga	19,892	10,391	2,972	0.3
Uyui	25,553	11,660	5,422	0.5
Urambo	32,741	17,001	10,343	0.6
Sikonge	12,635	7,863	2,298	0.3
Tabora Urban	5,869	2,093	763	0.4
Total	143,462	68,730	31,618	0.5

7.2.19 Number of Households by Planted Area (ha) and Quantity of Simsim Harvested (tons) by District and Crop-Long Rainy Season

District	Simsim			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	147	179	0	0.0
Igunga	0	0	0	0.0
Uyui	399	211	48	0.2
Urambo	244	94	35	0.4
Sikonge	186	64	12	0.2
Tabora Urban	0	0	0	0.0
Total	976	548	94	0.2

7.2.20 Number of Households by Planted Area (ha) and Quantity of Sunflower Harvested (tons) by District and Crop-Long Rainy Season

District	Sunflower			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	998	328	74	0.2
Uyui	0	0	0	0.0
Urambo	252	77	45	0.6
Sikonge	194	77	23	0.3
Tabora Urban	80	28	6	0.2
Total	1525	510	149	0.3

7.2.21 Number of Households by Planted Area (ha) and Quantity of Soya Beans Harvested (tons) by District and Crop-Long Rainy Season

District	Soya Beans			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	198	75	16	0.2
Tabora Urban	0	0	0	0.0
Total	198	75	16	0.2

7.2.22 Number of Households by Planted Area (ha) and Quantity of Onion Harvested (tons) by District and Crop-Long Rainy Season

District	Onions			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	747	151	298	2.0
Igunga	1488	1212	1446	1.2
Uyui	203	30	166	5.5
Urambo	598	72	591	8.2
Sikonge	0	0	0	0.0
Tabora Urban	215	41	49	1.2
Total	3250	1507	2550	1.7

7.2.23 Number of Households by Planted Area (ha) and Quantity of Tomatoes Harvested (tons) by District and Crop-Long Rainy Season

District	Tomatoes			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	743	120	304	2.5
Igunga	417	54	80	1.5
Uyui	1658	255	767	3.0
Urambo	1417	173	599	3.5
Sikonge	49	5	12	2.4
Tabora Urb	1187	221	760	3.4
Total	5471	827	2522	3.0

7.2.24 Number of Households by Planted Area (ha) and Quantity of Radish Harvested (tons) by District and Crop-Long Rainy Season

District	Radish			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	109	22	5	0.2
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	149	261	413	1.6
Tabora Urban	0	0	0	0.0
Total	258	283	419	1.5

7.2.25 Number of Households by Planted Area (ha) and Quantity of Bitter Aubergine Harvested (tons) by District and Crop-Long Rainy Season

District	Bitter Aubergine			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	116	47	65	1.4
Uyui	0	0	0	0.0
Urambo	124	50	20	0.4
Sikonge	0	0	0	0.0
Tabora Urban	0	0	0	0.0
Total	240	97	85	0.9

7.2.26 Number of Households by Planted Area (ha) and Quantity of Amaranths Harvested (tons) by District and Crop-Long Rainy Season

District	Amaranths			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	358	36	32	0.9
Sikonge	0	0	0	0.0
Tabora Urban	211	24	67	2.8
Total	568	60	98	1.6

7.2.27 Number of Households by Planted Area (ha) and Quantity of Cabbage Harvested (tons) by District and Crop-Long Rainy Season

District	Cabbage			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	206	42	46	1.1
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	40	7	9	1.4
Total	246	48	55	1.1

7.2.28 Number of Households by Planted Area (ha) and Quantity of Pumpkins Harvested (tons) by District and Crop-Long Rainy Season

District	Pumpkins			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	476	38	53	1.4
Total	476	38	53	1.4

7.2.29 Number of Households by Planted Area (ha) and Quantity of Okra Harvested (tons) by District and Crop-Long Rainy Season

District	Okra			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	50	20	30	1.5
Tabora Urban	27	1	1	1.2
Total	76	21	31	1.5

7.2.30 Number of Households by Planted Area (ha) and Quantity of Egg Plant Harvested (tons) by District and Crop-Long Rainy Season

District	Egg Plant			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	150	12	11	0.9
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	0	0	0	0.0
Total	150	12	11	0.9

7.2.31 Number of Households by Planted Area (ha) and Quantity of Ginger Harvested (tons) by District and Crop-Long Rainy Season

District	Ginger			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	27	5	13	2.4
Total	27	5	13	2.4

7.2.32 Number of Households by Planted Area (ha) and Quantity of Cucumber Harvested (tons) by District and Crop-Long Rainy Season

District	Cucumber			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	26	3	2	0.8
Total	26	3	2	0.8

7.2.33 Number of Households by Planted Area (ha) and Quantity of Chillies Harvested (tons) by District and Crop-Long Rainy Season

District	Chillies			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	0	0	0	0.0
Tabora Urban	25	1	7	5.6
Total	25	1	7	5.6

7.2.34 Number of Households by Planted Area (ha) and Quantity of Tobacco Harvested (tons) by District and Crop-Long Rainy Season

District	Tobacco			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	1,101	1,078	889	0.8
Igunga	221	230	85	0.4
Uyui	8,363	9,635	8,286	0.9
Urambo	16,304	15,565	13,758	0.9
Sikonge	4,637	5,735	6,401	1.1
Tabora Urban	320	246	194	0.8
Total	30,946	32,490	29,613	0.9

7.2.35 Number of Households by Planted Area (ha) and Quantity of Cotton Harvested (tons) by District and Crop-Long Rainy Season

District	Cotton			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	260	145	61	0.4
Igunga	12,674	21,751	9,438	0.4
Uyui	95	19	28	1.5
Urambo	367	494	404	0.8
Sikonge	0	0	0	0.0
Tabora Urban	0	0	0	0.0
Total	13,395	22,409	9,932	0.4

7.2.36 Number of Households by Planted Area (ha) and Quantity of Pyrethrum Harvested (tons) by District and Crop-Long Rainy Season

District	Pyrethrum			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0	0	0.0
Igunga	0	0	0	0.0
Uyui	0	0	0	0.0
Urambo	0	0	0	0.0
Sikonge	48	49	58	1.2
Tabora Urban	0	0	0	0.0
Total	48	49	58	1.2

7.2.37 Number of Households by Planted Area (ha) and Quantity of Jute Harvested (tons) by District and Crop-Long Rainy Season

District	Jute			
	Number of Households	Area Planted (ha)	Quantity Harvested (tons)	Yield (tons/ha)
Nzega	0	0.0	0.0	0.0
Igunga	0	0.0	0.0	0.0
Uyui	0	0.0	0.0	0.0
Urambo	0	0.0	0.0	0.0
Sikonge	0	0.0	0.0	0.0
Tabora Urban	24	0.4	1.2	3.1
Total	24	0.4	1.2	3.1

PERMANENT CROPS

7.3.1 Production of Permanent Crops by Crop Type and District - Tabora Region

District/Crop		Area Planted (ha)	Area Harvested (ha)	Quantity Harvested (tons)	Yield (Kgs/Ha)
Nzega	Malay Apple	29	9	7	823
	Sugarcane	0	0		0
	Jack Fruit	7	0		0
	Banana	92	52	42	822
	Mango	649	105	5,320	50,756
	Pawpaw	84	0	201	0
	Orange	234	15	83	5,620
	Guava	279	0	153	0
	Lime/Lemon	56	0	3	0
	Total	1,429	180	5,809	32,263
Igunga	Sugarcane	47	23	145	6,175
	Tamarin	5	0		0
	Mango	268	9	165	17,883
	Pawpaw	40	22	191	8,766
	Guava	17	10	60	5,709
	Total	377	65	560	8,633
Uyui	Palm Oil	291	0	22	0
	Coconut	1	0	2	0
	Sugarcane	64	0		0
	Jack Fruit	0		16	0
	Banana	70	17	123	7,323
	Avocado	0		59	0
	Mango	432	129	4,028	31,123
	Pawpaw	26	25	86	3,408
	Orange	74	52	147	2,828
	Guava	329	171	71	416
Total	1,285	394	4,555	11,552	
Urambo	Pigeon Pea	39	31	9	278
	Malay Apple	0	0	126	0
	Palm Oil	1,858	106	382	3,609
	Coconut	53	0		0
	Sugarcane	125	49	1,872	37,824
	Jack Fruit	0		7	0
	Banana	1,362	360	1,983	5,502
	Mango	1,618	141	10,186	72,476
	Pawpaw	516	80	406	5,078
	Orange	119	78	2,175	27,886
	Mandarine/Tangerine	51		6	0
	Guava	28	28	16	589
	Lime/Lemon	51		20	0
Total	5,820	873	17,188	19,686	
Sikonge	Sugarcane	5	5	5	988
	Jack Fruit	0		1	0
	Banana	19	19	78	4,056
	Mango	53	32	311	9,802
	Pawpaw	0	4	2	497
	Orange	8	8	40	5,055
	Guava	0	0	3	0
	Total	86	67	440	6,523

Cont.... Production of Permanent Crops by Crop Type and District - Tabora Region

Tabora Urban	Palm Oil	10	12	12	992
	Coconut	0		21	0
	Sugarcane	62	40	1,527	37,975
	Banana	56	42	390	9,343
	Avocado	1	0		0
	Mango	788	39	753	19,144
	Pawpaw	4	66	40	613
	Orange	6	8	192	22,609
	Guava	3	2	57	26,391
	Plums	0			0
	Lime/Lemon	3	17	186	10,999
	Total	933	227	3,178	14,026
Total	Pigeon Pea	39	31	9	278
	Malay Apple	29	9	134	15,285
	Palm Oil	2,158	118	416	3,538
	Coconut	53	0	23	0
	Sugarcane	303	118	3,549	30,031
	Tamarin	5	0		0
	Jack Fruit	7	0	24	0
	Banana	1,600	490	2,616	5,341
	Avocado	1	0	59	0
	Mango	3,807	455	20,762	45,630
	Pawpaw	670	197	926	4,712
	Orange	440	161	2,637	16,352
	Mandarine/Tangerine	51		6	0
	Guava	656	211	360	1,706
	Plums	0			0
	Lime/Lemon	110	17	209	12,325
Total	9,929	1,806	31,730	17,566	

7.3.2: Area Planted by Crop Type - Tabora Region

Crop	Area Planted	%
Mango	3,807	38.3
Palm Oil	2,158	21.7
Banana	1,600	16.1
Pawpaw	670	6.7
Guava	656	6.6
Orange	440	4.4
Sugarcane	303	3.0
Lime/Lemon	110	1.1
Coconut	53	0.5
Mandarine/Tangerine	51	0.5
Pigeon Pea	39	0.4
Malay Apple	29	0.3
Jack Fruit	7	0.1
Tamarin	5	0.0
Avocado	1	0.0
Plums	0	0.0
Total	9,929	100.0

7.3.3 Total Area Planted with Mango by District - Tabora Region

MANGO					
District	Area Planted with Banana	Total Area Planted (Ha)	% of Total Area Planted	Hh with Banana	Average Planted Area per Household
Urambo	1,618	120,683	1.3	3,953	0.4
Tabora Urban	788	18,539	4.2	416	1.9
Nzega	649	142,830	0.5	2,490	0.3
Uyui	432	110,751	0.4	1,221	0.4
Igunga	268	96,939	0.3	669	0.4
Sikonge	53	52,801	0.1	590	0.1
Total	3,807	542,544	0.7	9,338	0.4

7.3.4 Total Area Planted with Palm Oil by District - Tabora Region

PALM OIL					
District	Area Planted with Palm Oil	Total Area Planted (Ha)	% of Total Area Planted	Hh with Palm Oil	Average Planted Area per Household
Urambo	1,858	120,683	1.5	2,983	0.0
Uyui	291	110,751	0.3	419	0.0
Tabora Urban	10	18,539	0.1	24	0.0
Nzega	0	142,830	0.0	0	0.0
Igunga	0	96,939	0.0	0	0.0
Sikonge	0	52,801	0.0	0	0.0
Total	2,158	542,544	0.4	3,425	0.0

7.3.5 Total Area Planted with Banana by District - Tabora Region

BANANA					
District	Area Planted with Banana Oil	Total Area Planted (Ha)	% of Total Area Planted	Hh with Banana Oil	Average Planted Area per Household
Urambo	1,362	120,683	1.1	3,767	0.4
Nzega	92	142,830	0.1	601	0.2
Uyui	70	110,751	0.1	404	0.2
Tabora Urban	56	18,539	0.3	239	0.2
Sikonge	19	52,801	0.0	47	0.4
Igunga	0	96,939	0.0	0	0.0
Total	1,600	542,544	0.3	5,058	0.3

7.3.6 Total Area Planted with Pawpaw by District - Tabora Region

PAWPAW					
District	Area Planted with Pawpaw	Total Area Planted (Ha)	% of Total Area Planted	Hh with Pawpaw	Average Planted Area per Household
Urambo	516	120,683	0.43	1,517	0.34
Nzega	84	142,830	0.06	275	0.30
Igunga	40	96,939	0.04	448	0.09
Uyui	26	110,751	0.02	400	0.06
Tabora Urban	4	18,539	0.02	105	0.04
Sikonge	0	52,801	0.00	0	0.00
Total	670	542,544	0.12	2,745	0.24

7.3.7 Planted Area with Fertiliser by Fertiliser Type and Crop - Tabora Region

Crop	Fertilizer Use				Total
	Mostly Farm Yard Manure	Mostly Compost	Mostly Inorganic Fertilizer	No Fertilizer Applied	
Pigeon Pea	0	0	0	39	39
Malay Apple	0	0	0	29	29
Palm Oil	1,282	84	0	782	2,148
Coconut	51	0	0	2	53
Sugarcane	53	8	13	230	303
Tamarin	0	0	0	5	5
Jack Fruit	7	0	0	0	7
Banana	911	157	0	531	1,600
Avocado	0	0	0	1	1
Mango	998	170	1	2,638	3,807
Pawpaw	479	56	0	110	645
Orange	72	176	43	149	440
Mandarine/Tangerine	51	0	0	0	51
Guava	12	56	0	588	656
Plums	0	0	0	0	0
Lime/Lemon	51	57	0	2	110
Total	3,968	764	57	5,106	9,895

Cont....Planted Area with Fertiliser by Fertilizer Type - Tabora Region

Crop	Mostly Farm Yard Manure	Total	%
Jack Fruit	7	7	100.0
Mandarine/Tangerine	51	51	100.0
Coconut	51	53	96.0
Pawpaw	479	645	74.3
Palm Oil	1,282	2,148	59.7
Banana	911	1,600	57.0
Lime/Lemon	51	110	46.5
Mango	998	3,807	26.2
Sugarcane	53	303	17.4
Orange	72	440	16.3
Guava	12	656	1.9
Pigeon Pea	0	39	0.0
Malay Apple	0	29	0.0
Tamarin	0	5	0.0
Avocado	0	1	0.0
Plums	0	0	0.0
Total	3,968	9,895	40.1

Cont....Planted Area with Fertiliser by Fertilizer Type - Tabora Region

Crops	Mostly Inorganic Fertilizer	Total	%
Orange	43	440	9.9
Sugarcane	13	303	4.1
Mango	1	3,807	0.0
Pigeon Pea	0	39	0.0
Malay Apple	0	29	0.0
Palm Oil	0	2,148	0.0
Coconut	0	53	0.0
Tamarin	0	5	0.0
Jack Fruit	0	7	0.0
Banana	0	1,600	0.0
Avocado	0	1	0.0
Pawpaw	0	645	0.0
Mandarine/Tangerine	0	51	0.0
Guava	0	656	0.0
Plums	0	0	0.0
Lime/Lemon	0	110	0.0
Total	57	9,895	0.6

Cont....Planted Area with Fertiliser by Fertilizer Type - Tabora Region

Crops	Mostly Compost	Total	%
Lime/Lemon	57	110	51.6
Orange	176	440	40.1
Banana	157	1,600	9.8
Pawpaw	56	645	8.6
Guava	56	656	8.5
Mango	170	3,807	4.5
Palm Oil	84	2,148	3.9
Sugarcane	8	303	2.5
Pigeon Pea	0	39	0.0
Malay Apple	0	29	0.0
Coconut	0	53	0.0
Tamarin	0	5	0.0
Jack Fruit	0	7	0.0
Avocado	0	1	0.0
Mandarine/Tangerine	0	51	0.0
Plums	0	0	0.0
Total	764	9,895	7.7

AGROPROCESSING

8.0a: AGROPROCESSING: Number of Crops Growing Households Reported to have Processed Farm Products by District; 2002/03 Agriculture Year

District	Households That Processed Product		Households That Did Not Process Product		Total	
	Number	%	Number	%	Number	%
Nzega	63,856	97	1,710	3	65,566	100
Igunga	39,049	87	6,093	13	45,141	100
Uyui	39,991	97	1,326	3	41,318	100
Urambo	51,694	96	2,426	4	54,120	100
Sikonge	19,273	99	241	1	19,514	100
Tabora Urban	10,032	98	226	2	10,258	100
Total	223,896	95	12,021	5	235,917	100

8.0b AGRO PROCESSING: Number of Crop Growing Households by Method Processing and District; 2002/03 Agriculture Year of Farm Products Produced During 2002/03 Agriculture Year

District	Method of Processing							Total
	On Farm by Hand	On Farm by Machine	By Neighbour Machine	By Co-operative Union	By Trader	Others	By Factory	
Nzega	6,670	4,605	52,292	138	150	0	0	63,856
Igunga	2,858	215	35,432	0	432	0	110	39,049
Uyui	3,951	1,210	34,831	0	0	0	0	39,991
Urambo	4,805	1,996	44,893	0	0	0	0	51,694
Sikonge	2,817	835	15,474	147	0	0	0	19,273
Tabora Urban	526	169	9,231	26	27	54	0	10,032
Total	21,628	9,031	192,153	311	609	54	110	223,896
%	9.66	4.03	85.82	0.14	0.27	0.02	0.05	100.00

8.1.1a AGROPROCESSING: Number of Crop Growing Households Processing Crops During 2002/03 Agriculture Year by Location and Crop, Tabora Region

Crops	On Farm by Hand	On Farm by Machine	By Neighbour Machine	By Co-operative Union	By Trader	On Large Scale Farm	Other	By Factory	Total
Maize	14,399	9,146	9,146	311	495	0	54	0	33,552
Paddy	25,839	1,549	49,294	26	0	0	0	0	76,708
Sorghum	585	617	20,577	0	0	0	0	0	21,779
Bulrush Millet	0	50	313	0	0	0	0	0	363
Finger Millet	0	123	364	0	0	0	0	0	486
Cassava	4,167	224	10,599	0	0	150	50	0	15,190
Sweet Potatoes	270	0	0	0	0	0	0	0	270
Beans	427	0	50	0	0	0	0	0	477
Cowpeas	594	0	0	0	0	0	0	0	594
Chick Peas	112	0	0	0	0	0	0	0	112
Green Gram	0	0	98	0	0	0	0	0	98
Bambaranut	987	150	0	0	150	0	0	0	1,288
Groundnut	100,253	599	3,492	126	717	0	616	0	105,802
Sunflower	0	49	101	0	0	0	0	110	260
Simsim	49	0	0	0	0	0	0	0	49
Tobacco	0	0	0	0	0	0	0	27	27
Pawpaw	102	0	0	0	0	0	0	0	102
Orange	102	0	0	0	0	0	0	0	102
Oil Palm	1,682	0	230	0	0	0	0	0	1,912

8.1.1b AGROPROCESSING: Number of Crop Growing Households Reporting Processing of Farm Products Produced During 2003/04 Agricultural Year By Use of Product and Crop, Tabora Region

Crop	Product Use						Total
	Household / Human Consumption	Fuel for Cooking	Sale Only	Animal Consumption	Did Not Use	Other	
Maize	211,896	54	50	1,141	268	0	213,408
Paddy	74,695	121	685	471	498	237	76,708
Sorghum	21,779	0	0	0	0	0	21,779
Bulrush Millet	363	0	0	0	0	0	363
Finger Millet	486	0	0	0	0	0	486
Cassava	14,940	0	249	0	0	0	15,190
Sweet Potatoes	270	0	0	0	0	0	270
Beans	477	0	0	0	0	0	477
Cowpeas	594	0	0	0	0	0	594
Green Gram	98	0	0	0	0	0	98
Chick Peas	112	0	0	0	0	0	112
Bambaranut	987	0	300	0	0	0	1,288
Sunflower	211	0	49	0	0	0	260
Simsim	49	0	0	0	0	0	49
Groundnut	104,419	161	671	0	525	27	105,802
Oil Palm	1,794	0	118	0	0	0	1,912
Tobacco	0	0	27	0	0	0	27
Pawpaw	102	0	0	0	0	0	102
Orange	102	0	0	0	0	0	102
Total	433,375	336	2,149	1,613	1,291	263	439,027

8.1.1c AGROPROCESSING: Number of Crop Growing Households Reporting Processing of Farm Products Produced During 2003/04 Agricultural Year By Location of Sale of Product and Crop, Tabora Region

Crops	Where Sold									Total
	Neighbours	Local Market / Trade Store	Secondary Market	Marketing Co-operative	Farmers Association	Large Scale Farm	Trader at Farm	Other	Did not Sell	
Maize	2,455	744	99	231	114	173	1,245	4,544	203,803	213,408
Paddy	2,200	1,329	126	27	0	250	1,475	1,684	69,617	76,708
Sorghum	232	114	0	0	0	0	0	1,175	20,259	21,779
Bulrush Millet	0	0	0	0	0	0	0	0	363	363
Finger Millet	0	0	0	0	0	0	0	0	486	486
Cassava	27	401	0	0	0	0	125	198	14,439	15,190
Sweet Potatoes	0	0	0	0	0	0	0	0	270	270
Beans	0	0	0	0	0	0	0	0	477	477
Cowpeas	0	0	0	0	0	0	0	0	594	594
Green Gram	0	0	0	0	0	0	0	0	98	98
Chick Peas	0	0	0	0	0	0	0	0	112	112
Bambaranut	0	0	0	0	0	0	0	0	1,288	1,288
Sunflower	49	0	0	0	0	0	0	0	211	260
Simsim	0	0	0	0	0	0	0	0	49	49
Groundnut	945	641	0	228	0	0	539	2,945	100,504	105,802
Oil Palm	469	0	0	0	0	0	0	0	1,443	1,912
Tobacco	0	0	0	0	27	0	0	0	0	27
Pawpaw	0	0	0	0	0	0	102	0	0	102
Orange	0	0	0	0	0	0	102	0	0	102
Total	6,375	3,229	225	485	141	423	3,588	10,547	414,013	439,027

8.1.1d AGRO PROCESSING: Number of Crop Growing Households By Main Product and District During 2002/03 Agriculture Year - Tabora Region

District	Main Product						Total
	Flour / Meal	Grain	Oil	Juice	Pulp	Rubber	
Nzega	56,063	7,210	147	149	286	0	63,856
Igunga	35,784	2,256	110	0	789	110	39,049
Uyui	36,402	3,189	97	0	303	0	39,991
Urambo	46,450	4,260	621	126	115	121	51,694
Sikonge	17,045	1,550	147	0	532	0	19,273
Tabora Urban	9,421	505	27	0	54	27	10,032
Total	201,164	18,970	1,148	276	2,079	258	223,896

8.1.1e AGRO PROCESSING: Number of Crop Growing Households By Use of Primary Processed Product and District During 2002/03 Agriculture Year, Tanga Region

District	Product Use					Total
	Household / Human Consumption	Fuel for Cooking	Sale Only	Animal Consumption	Did Not Use	
Nzega	62,988	0	300	300	268	63,856
Igunga	38,401	0	230	418	0	39,049
Uyui	39,889	0	0	102	0	39,991
Urambo	51,449	0	0	245	0	51,694
Sikonge	19,126	0	98	49	0	19,273
Tabora Urban	9,952	54	0	27	0	10,032
Total	221,805	54	628	1,141	268	223,896

8.1.1f AGRO PROCESSING: Number of Crop Growing Households By Where Product Sold and District During 2002/03 Agriculture Year - Tabora Region

District	Where Sold									Total
	Neighbours	Local Market / Trade Store	Secondary Market	Marketing Co-operative	Farmers Association	Large Scale Farm	Trader at Farm	Other	Did not Sell	
Nzega	451	899	0	0	0	0	748	0	61,758	63,856
Igunga	688	116	0	0	114	0	232	1,837	36,062	39,049
Uyui	106	0	0	204	0	0	0	794	38,888	39,991
Urambo	1,273	126	0	0	0	124	0	0	50,171	51,694
Sikonge	340	0	99	0	0	49	0	2,322	16,463	19,273
Tabora Urban	317	54	0	27	0	0	13	24	9,598	10,032
Total	3,175	1,194	99	231	114	173	993	4,976	212,941	223,896

8.1.1g AGRO PROCESSING: Number of Crop Growing Households By Type of By-Product and District During 2002/03 Agriculture Year, Tabora Region

District	By Product									Total
	Bran	Cake	Husk	Juice	Pulp	Oil	Shell	No by-product	Other	
Nzega	49,205	0	7,851	0	294	147	0	6,360	0	63,856
Igunga	5,718	110	4,178	0	570	0	229	28,244	0	39,049
Uyui	18,887	106	7,022	0	499	0	0	13,380	97	39,991
Urambo	33,547	464	3,040	123	0	118	334	14,069	0	51,694
Sikonge	11,583	343	978	0	97	0	243	6,029	0	19,273
Tabora Urban	7,697	0	931	0	24	0	27	1,354	0	10,032
Total	126,638	1,023	23,999	123	1,483	265	832	69,436	97	223,896

MARKETING

10.1 MARETING: Number of Crop Growing Households Reported to have Sold Agricultural Produce by District During 2003/04 Agriculture Year, Tabora Region

District	Households that Sold		Households that Did not Sell		Total Number of Household
	Number	%	Number	%	
Nzega	27,633	42	37,933	58	65,566
Igunga	21,622	48	23,519	52	45,141
Uyui	21,884	53	19,434	47	41,318
Urambo	43,449	80	10,671	20	54,120
Sikonge	12,147	62	7,367	38	19,514
Tabora Urban	4,669	46	5,589	54	10,258
Total	131,403	56	104,514	44	235,917

10.2 MARKETING: Number of Households who Reported Main Reason for Not Selling their Crops by District during 2002/03 Agriculture Year, Tabora Region

District	Main Problem											
	Open Market Price Too Low	No Transport	Transport Cost Too High	No Buyer	Market too Far	Farmers Association Problems	Co-operative Problems	Government Regulatory Board Problems	Lack of Market Information	Other	Not applicable	Total
Nzega	10,860	1,332	741	0	1,030	0	0	0	0	0	13,670	27,633
Igunga	2,859	116	0	0	444	116	114	0	319	0	17,655	21,622
Uyui	6,769	512	410	100	1,136	0	0	0	102	0	12,854	21,884
Urambo	15,504	1,481	980	458	2,252	0	0	124	248	121	22,282	43,449
Sikonge	4,849	344	244	49	494	50	0	0	96	0	6,022	12,147
Tabora Urban	596	40	40	27	210	0	0	25	0	0	3,730	4,669
Total	41,437	3,825	2,415	634	5,565	165	114	149	764	121	76,214	131,403

10.3 Proportion of Households who Reported Main Reason for Not Selling their Crops by District During 2002/03 Agriculture Year

District	Open Market Price Too Low	No Transport	Transport Cost Too High	No Buyer	Market too Far	Farmers Association Problems	Co-operative Problems	Government Regulatory Board Problems	Lack of Market Information	Other	Not applicable	Total
Nzega	39.30	4.82	2.68	0.00	3.73	0.00	0.00	0.00	0.00	0.00	49.47	100.00
Igunga	13.22	0.54	0.00	0.00	2.05	0.54	0.53	0.00	1.47	0.00	81.65	100.00
Uyui	30.93	2.34	1.88	0.46	5.19	0.00	0.00	0.00	0.47	0.00	58.74	100.00
Urambo	35.68	3.41	2.25	1.05	5.18	0.00	0.00	0.29	0.57	0.28	51.28	100.00
Sikonge	39.92	2.83	2.01	0.41	4.06	0.41	0.00	0.00	0.79	0.00	49.58	100.00
Tabora Urban	12.77	0.86	0.85	0.57	4.50	0.00	0.00	0.54	0.00	0.00	79.89	100.00
Total	31.53	2.91	1.84	0.48	4.24	0.13	0.09	0.11	0.58	0.09	58.00	100.00

IRRIGATION / EROSION CONTROL

11.1 IRRIGATION: Number and Percent of Households Reporting Use of Irrigation During 2002/03 Agriculture Year by District

District	Household Practicing Irrigation		Household Not Practicing Irrigation		Total Number of Households Number
	Number of Households	%	Number of Households	%	
Nzega	2,938	4	62,628	96	65,566
Igunga	3,350	7	41,791	93	45,141
Uyui	3,310	8	38,008	92	41,318
Urambo	4,701	9	49,419	91	54,120
Sikonge	1,479	8	18,034	92	19,514
Tabora Urban	1,403	14	8,855	86	10,258
Total	17,181	7	218,736	93	235,917

11.2 IRRIGATION: Area (ha) of Irrigatable and NON Irrigated Land by District During 2002/03 Agriculture Year

District	Irrigatable Area (ha)	Irrigated Land (ha)	%
Nzega	1,641	1,241	76
Igunga	2,865	2,782	97
Uyui	1,977	1,709	86
Urambo	1,607	810	50
Sikonge	740	531	72
Tabora Urban	541	408	75
Total	9,371	7,480	80

11.3 IRRIGATION: Number of Agriculture Households Using Irrigation By Source of Irrigation Water by District During the 2003/04 Agricultural Year

District	Source of Irrigation Water					Total
	River	Dam	Well	Borehole	Canal	
Nzega	0	1,798	570	0	571	2,938
Igunga	966	2,037	346	0	0	3,350
Uyui	106	2,607	597	0	0	3,310
Urambo	0	125	3,971	605	0	4,701
Sikonge	97	93	979	50	261	1,479
Tabora Urban	27	758	591	0	27	1,403
Total	1,196	7,418	7,054	654	859	17,181

11.4 IRRIGATION: Number of Agriculture Households by Method Used to obtain Water and District During 2002/03 Agriculture Year

District	Method of Obtaining Water					Total
	Gravity	Hand Bucket	Hand Pump	Motor Pump	Other	
Nzega	1,622	1,316	0	0	0	2,938
Igunga	2,445	904	0	0	0	3,350
Uyui	407	2,797	0	0	105	3,310
Urambo	125	4,576	0	0	0	4,701
Sikonge	309	1,171	0	0	0	1,479
Tabora Urban	79	1,063	46	26	188	1,403
Total	4,987	11,828	46	26	293	17,181

11.5 IRRIGATION: Number of Agriculture Households by Method of Field Application of Irrigation Water and District for the 2002/03 Agriculture Year

District	Method of Field Application				Total
	Flood	Sprinkler	Water Hose	Bucket / Watering Can	
Nzega	1,622	0	0	1,316	2,938
Igunga	2,775	114	0	461	3,350
Uyui	618	0	0	2,692	3,310
Urambo	378	0	0	4,323	4,701
Sikonge	507	195	0	778	1,479
Tabora Urban	27	25	99	1,252	1,403
Total	5,926	334	99	10,821	17,181

11.6: IRRIGATION: Number of Households With Erosion Control/Water Harvesting Facilities on their Land By District

District	Presence of Erosion Control/Water Harvesting Facilities				
	Have facility		Does Not Have Facility		Total Number of Household
	Number	%	Number	%	
Nzega	1,041	2	64,525	98	65,566
Igunga	115	0	45,026	100	45,141
Uyui	2,209	5	39,109	95	41,318
Urambo	965	2	53,155	98	54,120
Sikonge	343	2	19,171	98	19,514
Tabora Urban	727	7	9,531	93	10,258
Total	5,399	2	230,518	98	235,917

11.7 EROSION CONTROL: Number of Erosion Control Harvesting Structures By Type and District as of 2002/03 Agriculture Year

District	Type of Erosion Control								Total Number of Structures
	Terraces	Erosion Control Bunds	Gabions / Sandbag	Vetiver Grass	Tree Belts	Water Harvesting Bunds	Drainage Ditches	Dam	
Nzega	0	3,857	0	0	0	0	281	901	5,039
Igunga	0	230	0	0	0	0	0	0	230
Uyui	0	619	317	0	3,058	1,372	204	3,679	9,248
Urambo	0	7,034	0	385	193	0	0	0	7,612
Sikonge	99	1,501	0	0	446	1,239	0	0	3,286
Tabora Urban	455	1,068	0	0	520	646	487	26	3,202
Total	554	14,309	317	385	4,217	3,258	971	4,606	28,616

ACCESS TO FARM INPUTS / IMPLEMENTS

Table 12.1.1 ACCESS TO INPUTS: Number of Crop Growing Households Using Chemical Fertilizer by District, 2002/03 Agricultural Year

District	Using Chemical Fertilizers		NOT Using Chemical Fertilizers		Total Number of Crop Growing Households
	No. of Households	%	No. of Households	%	
Nzega	2,887	4	62,679	96	65,566
Igunga	1,206	3	43,935	97	45,141
Uyui	11,025	27	30,293	73	41,318
Urambo	21,354	39	32,766	61	54,120
Sikonge	6,773	35	12,741	65	19,514
Tabora Urban	3,042	30	7,216	70	10,258
Total	46,287	20	189,630	80	235,917

Table 12.1.2 ACCESS TO INPUTS: Number of Agricultural Households Using Farm Yard Manure by District, 2002/03 Agricultural Year

District	Using Farm Yard Manure		NOT Using Farm Yard Manure		Total
	No. of Households	%	No. of Households	%	
Nzega	29,333	45	36,233	55	65,566
Igunga	12,244	27	32,897	73	45,141
Uyui	8,020	19	33,297	81	41,318
Urambo	8,576	16	45,545	84	54,120
Sikonge	4,202	22	15,312	78	19,514
Tabora Urban	2,903	28	7,355	72	10,258
Total	65,279	28	170,638	72	235,917

Table 12.1.3 ACCESS TO INPUTS: Number of Agricultural Households Using COMPOST Manure by District, 2002/03 Agricultural Year

District	Using Compost		Not Using Compost		Total
	No. of Households	%	No. of Households	%	
Nzega	6,580	10	58,986	90	65,566
Igunga	459	1	44,682	99	45,141
Uyui	2,973	7	38,345	93	41,318
Urambo	4,696	9	49,425	91	54,120
Sikonge	295	2	19,219	98	19,514
Tabora Urb	365	4	9,893	96	10,258
Total	15,368	7	220,549	93	235,917

Table 12.1.4 ACCESS TO INPUTS: Number of Agricultural Households Using Insecticide/Fungicides by District, 2002/03 Agricultural Year

District	Using Insecticide/Fungicides		NOT Using Insecticide/Fungicides		Total
	No. of Households	%	No. of Households	%	
Nzega	4,294	7	61,272	93	65,566
Igunga	6,162	14	38,979	86	45,141
Uyui	11,823	29	29,494	71	41,318
Urambo	16,130	30	37,990	70	54,120
Sikonge	6,095	31	13,419	69	19,514
Tabora Urban	3,355	33	6,903	67	10,258
Total	47,859	20	188,057	80	235,917

Table 12.1.5 ACCESS TO INPUTS: Number of Agricultural Households Using Herbicides by District, 2002/03 Agricultural Year

District	Using Herbicides		NOT Using Herbicides		Total
	No. of Households	%	No. of Households	%	
Nzega	149	0	65,417	100	65,566
Igunga	345	1	44,797	99	45,141
Uyui	306	1	41,012	99	41,318
Urambo	973	2	53,148	98	54,120
Sikonge	248	1	19,266	99	19,514
Tabora Urban	37	0	10,221	100	10,258
Total	2,056	1	233,861	99	235,917

Table 12.1.6 ACCESS TO INPUTS: Number of Agricultural Households using Improved Seeds by District, 2002/03 Agricultural Year

District	Using Improved Seeds		NOT Using Improved Seeds		Total
	No. of Households	%	No. of Households	%	
Nzega	5,774	9	59,792	91	65,566
Igunga	10,971	24	34,170	76	45,141
Uyui	6,679	16	34,639	84	41,318
Urambo	16,300	30	37,820	70	54,120
Sikonge	3,730	19	15,784	81	19,514
Tabora Urban	2,253	22	8,005	78	10,258
Total	45,706	19	190,210	81	235,917

Table 12.1.7 ACCESS TO INPUTS: Number of Agricultural Households by Source of Chemical Fertilizer and District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Secondary Market		Development Project		Crop Buyers		Large Scale Farm		Locally Produced by Household		Neighbour		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	0	0	543	1	1,922	3	0	0	0	0	272	0	0	0	0	0	150	0	62,679	96	65,566
Igunga	106	0	0	0	1,100	2	0	0	0	0	0	0	0	0	0	0	0	0	43,935	97	45,141
Uyui	7,630	18	211	1	2,977	7	0	0	0	0	0	0	0	102	0	106	0	30,293	73	41,318	
Urambo	14,360	27	1,099	2	5,661	10	109	0	0	0	0	0	0	0	0	126	0	32,766	61	54,120	
Sikonge	4,288	22	343	2	1,205	6	0	0	49	0	149	1	0	0	0	739	4	12,741	65	19,514	
Tabora Urban	134	1	99	1	2,732	27	0	0	0	0	0	0	26	0	26	0	25	0	7,216	70	10,258
Total	26,518	11	2,296	1	15,595	7	109	0	49	0	420	0	26	0	128	0	1,146	0	189,630	80	235,917

Table 12.1.8 ACCESS TO INPUTS: Number of Agricultural Households by Source of Farm Yard Manure by District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Development Project		Crop Buyers		Large Scale Farm		Locally Produced by Household		Neighbour		Other		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	150	0	149	0	150	0	0	0	0	0	0	0	23,679	36	5,055	8	150	0	36,233	55	65,566
Igunga	0	0	114	0	204	0	0	0	114	0	109	0	6,932	15	4,772	11	0	0	32,897	73	45,141
Uyui	0	0	0	0	106	0	196	0	98	0	0	0	5,797	14	1,718	4	106	0	33,297	81	41,318
Urambo	0	0	0	0	126	0	0	0	124	0	0	0	4,916	9	1,966	4	1,443	3	45,545	84	54,120
Sikonge	98	1	0	0	0	0	0	0	0	0	740	4	2,727	14	587	3	50	0	15,312	78	19,514
Tabora Urban	53	1	0	0	53	1	27	0	27	0	0	0	1,438	14	1,281	12	24	0	7,355	72	10,258
Total	302	0	262	0	639	0	223	0	362	0	849	0	45,489	19	15,380	7	1,772	1	170,638	72	235,917

Table 12.1.9 ACCESS TO INPUTS: Number of Agricultural Households by Source of COMPOST Manure by District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Development Project		Crop Buyers		Large Scale Farm		Locally Produced by Household		Neighbour		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	149	0	149	0	0	0	0	0	0	0	0	0	5,989	9	294	0	58,986	90	65,566
Igunga	0	0	0	0	0	0	0	0	116	0	0	0	344	1	0	0	44,682	99	45,141
Uyui	1,354	3	98	0	104	0	98	0	0	0	0	0	1,221	3	98	0	38,345	93	41,318
Urambo	0	0	124	0	0	0	0	0	236	0	0	0	4,335	8	0	0	49,425	91	54,120
Sikonge	0	0	0	0	0	0	0	0	0	0	99	1	196	1	0	0	19,219	98	19,514
Tabora Urban	0	0	0	0	0	0	27	0	0	0	0	0	292	3	46	0	9,893	96	10,258
Total	1,503	1	371	0	104	0	125	0	352	0	99	0	12,377	5	438	0	220,549	93	235,917

Table 12.1.10 ACCESS TO INPUTS: Number of Agricultural Households by Source of Pesticides/Fungicides by District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Secondary Market		Development Project		Crop Buyers		Large Scale Farm		Locally Produced by Household		Neighbour		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	124	0	543	1	3,055	5	150	0	150	0	272	0	0	0	0	0	0	0	61,272	93	65,566
Igunga	3,992	9	115	0	1,825	4	114	0	0	0	0	0	0	0	0	116	0	38,979	86	45,141	
Uyui	7,418	18	211	1	3,383	8	193	0	0	0	197	0	0	105	0	317	1	29,494	71	41,318	
Urambo	11,340	21	730	1	3,187	6	124	0	0	0	124	0	0	126	0	499	1	37,990	70	54,120	
Sikonge	3,361	17	294	2	1,369	7	50	0	49	0	246	1	0	47	0	678	3	13,419	69	19,514	
Tabora Urban	161	2	99	1	2,939	29	26	0	0	0	53	1	26	0	51	0	0	6,903	67	10,258	
Total	26,395	11	1,993	1	15,758	7	657	0	200	0	891	0	26	0	330	0	1,610	1	188,057	80	235,917

Table 12.1.11 ACCESS TO INPUTS: Number of Agricultural Households by Source of Herbicides by District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Development Project		Locally Produced by Household		Neighbour		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	0	0	0	0	149	0	0	0	0	0	0	0	65,417	100	65,566
Igunga	0	0	0	0	345	1	0	0	0	0	0	0	44,797	99	45,141
Uyui	0	0	105	0	102	0	98	0	0	0	0	0	41,012	99	41,318
Urambo	864	2	0	0	0	0	0	0	109	0	0	0	53,148	98	54,120
Sikonge	149	1	50	0	50	0	0	0	0	0	0	0	19,266	99	19,514
Tabora Urban	0	0	0	0	17	0	0	0	0	0	20	0	10,221	100	10,258
Total	1,013	0	155	0	662	0	98	0	109	0	20	0	233,861	99	235,917

Table 12.1.12 ACCESS TO INPUTS: Number of Agricultural Households Source of Improved Seeds by District, 2002/03 Agricultural Year

District	Co-operative		Local Farmers Group		Local Market / Trade Store		Secondary Market		Development Project		Crop Buyers		Locally Produced by Household		Neighbour		Other		Not applicable		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	124	0	282	0	4,374	7	0	0	721	1	136	0	0	0	138	0	0	0	59,792	91	65,566
Igunga	8,632	19	223	0	1,086	2	116	0	0	0	340	1	115	0	459	1	0	0	34,170	76	45,141
Uyui	4,072	10	628	2	1,662	4	0	0	0	0	317	1	0	0	0	0	0	0	34,639	84	41,318
Urambo	10,622	20	855	2	2,845	5	118	0	0	0	233	0	1,385	3	241	0	0	0	37,820	70	54,120
Sikonge	1,694	9	245	1	1,354	7	49	0	49	0	50	0	0	0	289	1	0	0	15,784	81	19,514
Tabora Urban	54	1	119	1	1,935	19	0	0	0	0	67	1	0	0	51	0	27	0	8,005	78	10,258
Total	25,198	11	2,352	1	13,256	6	282	0	771	0	1,142	0	1,500	1	1,179	0	27	0	190,210	81	235,917

Table 12.1.13 ACCESS TO INPUTS: Number of Agricultural Households and Distance to Source of Chemical Fertilizer by District, 2002/03 Agricultural Year

District	Less than 1 km		Between 1 and 3 km		Between 3 and 10 km		Between 10 and 20 km		20 km and Above		Total Number
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	996	34	150	5	858	30	737	26	146	5	2,887
Igunga	110	9	106	9	459	38	114	9	416	35	1,206
Uyui	2,207	20	3,444	31	1,872	17	936	8	2,566	23	11,025
Urambo	7,982	37	4,899	23	4,477	21	2,843	13	1,154	5	21,354
Sikonge	2,601	38	1,018	15	1,505	22	1,066	16	582	9	6,773
Tabora Urban	211	7	87	3	953	31	1,582	52	209	7	3,042
Total	14,107	30	9,704	21	10,124	22	7,279	16	5,073	11	46,287

Table 12.1.14 ACCESS TO INPUTS: Number of Agricultural Households and Distance to Source of Farm Yard Manure by District, 2002/03 Agricultural Year

District	Less than 1 km		Between 1 and 3 km		Between 3 and 10 km		Between 10 and 20 km		20 km and Above		Total Number
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	29,183	99	0	0	0	0	0	0	150	1	29,333
Igunga	11,361	93	666	5	217	2	0	0	0	0	12,244
Uyui	7,630	95	292	4	0	0	0	0	98	1	8,020
Urambo	8,223	96	227	3	0	0	126	1	0	0	8,576
Sikonge	3,907	93	295	7	0	0	0	0	0	0	4,202
Tabora Urban	2,347	81	424	15	53	2	53	2	27	1	2,903
Total	62,650	96	1,904	3	270	0	179	0	275	0	65,279

Table 12.1.15 ACCESS TO INPUTS: Number of Agricultural Households and Distance to Source of COMPOST Manure by District, 2002/03 Agricultural Year

District	Less than 1 km		Between 1 and 3 km		Between 3 and 10 km		Between 10 and 20 km		Total Number
	Number	%	Number	%	Number	%	Number	%	
Nzega	6,580	100	0	0	0	0	0	0	6,580
Igunga	459	100	0	0	0	0	0	0	459
Uyui	2,973	100	0	0	0	0	0	0	2,973
Urambo	4,076	87	0	0	115	2	505	11	4,696
Sikonge	295	100	0	0	0	0	0	0	295
Tabora Urban	312	86	26	7	0	0	26	7	365
Total	14,696	96	26	0	115	1	531	3	15,368

Table 12.1.16 ACCESS TO INPUTS: Number of Agricultural Households and Distance to Source of Improved Seeds by District, 2002/03 Agricultural Year

District	Less than 1 km		Between 1 and 3 km		Between 3 and 10 km		Between 10 and 20 km		20 km and Above		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,230	21	0	0	1,337	23	2,324	40	883	15	5,774
Igunga	4,438	40	3,515	32	2,162	20	440	4	417	4	10,971
Uyui	1,790	27	2,088	31	933	14	205	3	1,663	25	6,679
Urambo	6,260	38	3,318	20	3,594	22	2,225	14	903	6	16,300
Sikonge	1,167	31	531	14	858	23	780	21	394	11	3,730
Tabora Urban	184	8	156	7	676	30	1,102	49	133	6	2,253
Total	15,069	33	9,608	21	9,560	21	7,077	15	4,393	10	45,706

Table 12.1.17 ACCESS TO INPUTS: Number of Agricultural Households and Distance to Source of Insecticides/Fungicides by District, 2002/03 Agricultural Year

District	Less than 1 km		Between 1 and 3 km		Between 3 and 10 km		Between 10 and 20 km		20 km and Above		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,080	25	0	0	1,158	27	860	20	1,197	28	4,294
Igunga	1,476	24	1,712	28	2,407	39	115	2	452	7	6,162
Uyui	2,815	24	3,230	27	2,167	18	830	7	2,781	24	11,823
Urambo	5,496	34	4,062	25	3,110	19	2,632	16	830	5	16,130
Sikonge	2,003	33	928	15	1,210	20	782	13	1,171	19	6,095
Tabora Urban	157	5	149	4	1,052	31	1,851	55	146	4	3,355
Total	13,028	27	10,081	21	11,103	23	7,071	15	6,576	14	47,859

Table 12.1.18 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using Chemical Fertilizer by District, 2002/03 Agricultural Year

District	Not Available		Price Too High		No Money to Buy		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	8,849	14	51,521	82	0	0	281	0	2,029	3	0	0	0	0	62,679
Igunga	20,332	46	17,655	40	693	2	904	2	4,124	9	0	0	228	1	43,935
Uyui	3,591	12	24,391	81	413	1	502	2	1,197	4	0	0	200	1	30,293
Urambo	3,420	10	27,367	84	107	0	373	1	1,373	4	125	0	0	0	32,766
Sikonge	2,160	17	10,062	79	95	1	0	0	331	3	0	0	93	1	12,741
Tabora Urban	0	0	7,032	97	27	0	39	1	92	1	0	0	25	0	7,216
Total	38,352	20	138,027	73	1,335	1	2,099	1	9,147	5	125	0	546	0	189,630

Table 12.1.19 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using Farm Yard Manure by District,

District	Not Available		Price Too High		No Money to Buy		Too Much Labour Required		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	19,964	55	10,334	29	4,529	12	0	0	119	0	863	2	0	0	424	1	36,233
Igunga	6,114	19	3,019	9	13,396	41	1,258	4	4,364	13	2,940	9	108	0	1,697	5	32,897
Uyui	19,353	58	4,170	13	4,460	13	2,493	7	920	3	1,020	3	0	0	880	3	33,297
Urambo	27,577	61	4,877	11	8,877	19	1,655	4	1,571	3	626	1	123	0	240	1	45,545
Sikonge	10,394	68	2,291	15	1,709	11	343	2	246	2	230	2	50	0	50	0	15,312
Tabora Urban	4,515	61	806	11	1,823	25	67	1	66	1	53	1	0	0	25	0	7,355
Total	87,917	52	25,497	15	34,794	20	5,817	3	7,285	4	5,733	3	280	0	3,315	2	170,638

Table 12.1.20 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using COMPOST Manure by District,

District	Not Available		Price Too High		No Money to Buy		Too Much Labour Required		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	5,806	10	10,547	18	19,735	33	1,175	2	20,097	34	425	1	0	0	1,201	2	58,986
Igunga	2,453	5	2,780	6	14,008	31	1,250	3	21,375	48	2,602	6	108	0	106	0	44,682
Uyui	4,616	12	3,056	8	10,766	28	1,796	5	17,184	45	927	2	0	0	0	0	38,345
Urambo	6,290	13	3,903	8	26,931	54	1,842	4	8,886	18	876	2	698	1	0	0	49,425
Sikonge	2,522	13	1,706	9	9,826	51	756	4	3,980	21	330	2	0	0	99	1	19,219
Tabora Urban	239	2	794	8	7,428	75	61	1	1,174	12	120	1	0	0	77	1	9,893
Total	21,926	10	22,785	10	88,694	40	6,879	3	72,696	33	5,279	2	806	0	1,484	1	220,549

Table 12.1.21 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using Pesticides/Fungicides by District.

District	Not Available		Price Too High		No Money to Buy		Too Much Labour Required		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	5,930	10	51,565	84	150	0	0	0	2,906	5	571	1	0	0	150	0	61,272
Igunga	8,462	22	24,258	62	793	2	0	0	4,797	12	668	2	0	0	0	0	38,979
Uyui	6,070	21	21,185	72	707	2	104	0	804	3	414	1	106	0	105	0	29,494
Urambo	11,099	29	23,289	61	1,081	3	0	0	1,187	3	1,123	3	96	0	115	0	37,990
Sikonge	2,762	21	9,300	69	444	3	198	1	479	4	140	1	0	0	96	1	13,419
Tabora Urban	53	1	6,379	92	188	3	0	0	125	2	80	1	0	0	79	1	6,903
Total	34,376	18	135,975	72	3,362	2	302	0	10,299	5	2,996	2	202	0	545	0	188,057

Table 12.1.22 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using Herbicides by District, 2002/03

District	Not Available		Price Too High		No Money to Buy		Too Much Labour Required		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	5,296	8	50,658	77	451	1	0	0	6,072	9	2,817	4	0	0	124	0	65,417
Igunga	10,186	23	21,012	47	1,599	4	0	0	9,289	21	2,711	6	0	0	0	0	44,797
Uyui	7,631	19	20,425	50	918	2	104	0	8,693	21	3,137	8	106	0	0	0	41,012
Urambo	20,861	39	20,973	39	1,170	2	0	0	6,392	12	3,424	6	109	0	219	0	53,148
Sikonge	4,536	24	10,665	55	591	3	149	1	2,416	13	810	4	0	0	99	1	19,266
Tabora Urban	256	3	2,819	28	262	3	0	0	6,778	66	81	1	0	0	25	0	10,221
Total	48,765	21	126,552	54	4,991	2	253	0	39,639	17	12,979	6	214	0	468	0	233,861

Table 12.1.23 ACCESS TO INPUTS: Number of Agricultural Households and Reason for NOT using Improved Seeds by District, 2002/03

District	Not Available		Price Too High		No Money to Buy		Too Much Labour Required		Do not Know How to Use		Input is of No Use		Locally Produced by Household		Other		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	13,186	22	45,270	76	150	0	0	0	140	0	744	1	0	0	300	1	59,792
Igunga	13,850	41	17,577	51	461	1	0	0	1,951	6	217	1	0	0	114	0	34,170
Uyui	11,091	32	21,699	63	821	2	0	0	403	1	626	2	0	0	0	0	34,639
Urambo	15,048	40	21,575	57	825	2	0	0	373	1	0	0	0	0	0	0	37,820
Sikonge	4,616	29	9,542	60	198	1	149	1	99	1	146	1	985	6	50	0	15,784
Tabora Urban	26	0	7,510	94	206	3	0	0	65	1	146	2	0	0	52	1	8,005
Total	57,818	30	123,173	65	2,661	1	149	0	3,030	2	1,879	1	985	1	516	0	190,210

Table 12.1.24 ACCESS TO INPUTS: Number of Agricultural Households and Quality of Chemical Fertilizer by District, 2002/03 Agricultural Year

District	Excellent		Good		Average		Poor		Does not		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,033	36	1,568	54	286	10	0	0	0	0	2,887
Igunga	686	57	519	43	0	0	0	0	0	0	1,206
Uyui	3,882	35	6,104	55	724	7	315	3	0	0	11,025
Urambo	10,928	51	8,556	40	1,495	7	376	2	0	0	21,354
Sikonge	2,376	35	4,052	60	345	5	0	0	0	0	6,773
Tabora Urban	578	19	2,013	66	290	10	134	4	27	1	3,042
Total	19,484	42	22,812	49	3,140	7	825	2	27	0	46,287

Table 12.1.25 ACCESS TO INPUTS: Number of Agricultural Households and Quality of Farm Yard Manure by District, 2002/03 Agricultural Year

District	Excellent		Good		Average		Poor		Total
	Number	%	Number	%	Number	%	Number	%	
Nzega	15,446	53	12,461	42	1,426	5	0	0	29,333
Igunga	4,681	38	6,553	54	1,010	8	0	0	12,244
Uyui	2,571	32	4,354	54	994	12	102	1	8,020
Urambo	5,193	61	2,846	33	537	6	0	0	8,576
Sikonge	1,814	43	2,294	55	94	2	0	0	4,202
Tabora Urban	692	24	1,973	68	238	8	0	0	2,903
Total	30,398	47	30,480	47	4,299	7	102	0	65,279

Table 12.1.26 ACCESS TO INPUTS: Number of Agricultural Households and Quality of COMPOST Manure by District, 2002/03 Agricultural Year

District	Excellent		Good		Average		Poor		Total
	Number	%	Number	%	Number	%	Number	%	
Nzega	1,285	20	4,999	76	296	5	0	0	6,580
Igunga	0	0	230	50	230	50	0	0	459
Uyui	1,459	49	1,221	41	294	10	0	0	2,973
Urambo	602	13	2,240	48	1,853	39	0	0	4,696
Sikonge	48	16	198	67	50	17	0	0	295
Tabora Urban	73	20	239	66	26	7	27	7	365
Total	3,466	23	9,127	59	2,748	18	27	0	15,368

Table 12.1.27 ACCESS TO INPUTS: Number of Agricultural Households and Quality of Pesticides/Fungicides by District, 2002/03 Agricultural Year

District	Excellent		Good		Average		Poor		Does not		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,126	26	2,901	68	124	3	144	3	0	0	4,294
Igunga	1,266	21	4,450	72	224	4	222	4	0	0	6,162
Uyui	5,110	43	6,510	55	203	2	0	0	0	0	11,823
Urambo	6,837	42	8,421	52	747	5	125	1	0	0	16,130
Sikonge	2,093	34	3,668	60	241	4	43	1	50	1	6,095
Tabora Urban	732	22	2,396	71	200	6	27	1	0	0	3,355
Total	17,163	36	28,345	59	1,739	4	562	1	50	0	47,859

Table 12.1.28 ACCESS TO INPUTS: Number of Agricultural Households and Quality of Herbicides by District, 2002/03

District	Excellent		Good		Average		Total
	Number	%	Number	%	Number	%	
Nzega	0	0	149	100	0	0	149
Igunga	115	33	230	67	0	0	345
Uyui	0	0	306	100	0	0	306
Urambo	505	52	468	48	0	0	973
Sikonge	149	60	50	20	50	20	248
Tabora Urban	0	0	37	100	0	0	37
Total	769	37	1,238	60	50	2	2,056

Table 12.1.29 ACCESS TO INPUTS: Number of Agricultural Households and Quality of Improved Seeds by District, 2002/03 Agricultural Year

District	Excellent		Good		Average		Poor		Does not Work		Total
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	2,724	47	2,613	45	438	8	0	0	0	0	5,774
Igunga	3,652	33	5,522	50	1,569	14	114	1	114	1	10,971
Uyui	2,527	38	4,152	62	0	0	0	0	0	0	6,679
Urambo	8,976	55	6,973	43	227	1	124	1	0	0	16,300
Sikonge	1,165	31	2,370	64	195	5	0	0	0	0	3,730
Tabora Urban	560	25	1,494	66	172	8	27	1	0	0	2,253
Total	19,603	43	23,123	51	2,601	6	265	1	114	0	45,706

Table 12.1.30 ACCESS TO INPUTS: Number of Agricultural Households With Plan to use Next Year Chemical Fertilizer by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	14,192	22	51,374	78	65,566
Igunga	4,918	11	40,224	89	45,141
Uyui	15,651	38	25,667	62	41,318
Urambo	32,925	61	21,195	39	54,120
Sikonge	9,732	50	9,782	50	19,514
Tabora Urban	3,825	37	6,433	63	10,258
Total	81,242	34	154,675	66	235,917

Table 12.1.31 ACCESS TO INPUTS: Number of Agricultural Households With Plan to use Next Year Farm Yard Manure by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next Year		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	47,418	72	18,148	28	65,566
Igunga	31,132	69	14,009	31	45,141
Uyui	12,879	31	28,438	69	41,318
Urambo	15,250	28	38,870	72	54,120
Sikonge	6,507	33	13,006	67	19,514
Tabora Urban	3,533	34	6,725	66	10,258
Total	116,720	49	119,197	51	235,917

Table 12.1.33 ACCESS TO INPUTS: Number of Agricultural Households With Plan to use Next Year Insecticides/Fungicides by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next Year		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	25,067	38	40,499	62	65,566
Igunga	22,236	49	22,905	51	45,141
Uyui	18,136	44	23,182	56	41,318
Urambo	22,444	41	31,676	59	54,120
Sikonge	8,259	42	11,255	58	19,514
Tabora Urban	3,672	36	6,586	64	10,258
Total	99,814	42	136,103	58	235,917

Table 12.1.35 ACCESS TO INPUTS: Number of Agricultural Households using Improved Seeds by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next Year		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	29,068	44	36,498	56	65,566
Igunga	29,364	65	15,777	35	45,141
Uyui	12,035	29	29,283	71	41,318
Urambo	27,331	51	26,789	49	54,120
Sikonge	6,411	33	13,102	67	19,514
Tabora Urban	2,729	27	7,529	73	10,258
Total	106,937	45	128,979	55	235,917

Table 12.1.32 ACCESS TO INPUTS: Number of Agricultural Households With Plan to use Next Year COMPOST Manure by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next Year		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	20,760	32	44,806	68	65,566
Igunga	2,519	6	42,622	94	45,141
Uyui	3,804	9	37,514	91	41,318
Urambo	7,485	14	46,635	86	54,120
Sikonge	740	4	18,774	96	19,514
Tabora Urban	1,027	10	9,231	90	10,258
Total	36,336	15	199,581	85	235,917

Table 12.1.34 ACCESS TO INPUTS: Number of Agricultural Households With Plan to use Next Year Herbicides by District, 2002/03 Agricultural Year

District	Agricultural Households With Plan to use Next Year		Agricultural Households With NO Plan to use Next Year		Total
	Number	%	Number	%	
Nzega	3,391	5	62,175	95	65,566
Igunga	6,510	14	38,631	86	45,141
Uyui	2,896	7	38,422	93	41,318
Urambo	4,108	8	50,012	92	54,120
Sikonge	775	4	18,739	96	19,514
Tabora Urban	149	1	10,109	99	10,258
Total	17,829	8	218,088	92	235,917

AGRICULTURE CREDIT

13.1a AGRICULTURE CREDIT: Number of Agriculture Households Receiving Credit By Sex of Household Head Receiving Credit and District During the 2002/03 Agriculture Year

District	Male		Female		Total
	Number	%	Number	%	
Nzega	1,411	100	0	0	1,411
Igunga	336	100	0	0	336
Uyui	7,629	96	309	4	7,938
Urambo	11,186	95	618	5	11,803
Sikonge	3,985	99	50	1	4,034
Tabora Urban	132	100	0	0	132
Total	24,679	96	977	4	25,655

13.1b AGRICULTURE CREDIT: Number of Households Receiving Credit By Source of Credit By District

District	Family, Friend and Relative	Commercial Bank	Co-operative	Saving & Credit Society	Trader / Trade Store	Religious Organisation / NGO / Project	Other	Total
Nzega	150	0	0	146	286	829	0	1,411
Igunga	230	0	0	0	0	106	0	336
Uyui	306	210	7,318	104	0	0	0	7,938
Urambo	503	125	11,051	0	0	0	125	11,803
Sikonge	245	48	3,548	0	47	145	0	4,034
Tabora Urban	0	0	132	0	0	0	0	132
Total	1,434	384	22,049	250	333	1,080	125	25,655
%	6	1	86	1	1	4	0	100

13.2a AGRICULTURE CREDIT: Number of Households Reported Main Reasons for Not Using Credit By District During the 2002/03 Agriculture Year

District	Not needed	Not available	Did not want to go into debt	Interest rate/cost too high	Did not know how to get credit	Difficult bureaucracy procedure	Credit granted too late	Other	Don't know about credit	Total
Nzega	2,835	9,141	7,727	1,316	22,339	854	150	0	19,793	64,155
Igunga	1,581	16,372	3,082	1,376	10,589	1,031	226	0	10,548	44,805
Uyui	1,091	6,299	4,338	616	11,904	1,113	105	0	7,913	33,379
Urambo	1,926	10,437	3,627	952	12,812	2,052	690	126	9,694	42,317
Sikonge	920	3,446	2,180	294	3,956	331	247	149	3,956	15,480
Tabora Urban	391	1,622	626	213	4,621	350	0	0	2,302	10,126
Total	8,744	47,318	21,580	4,768	66,223	5,730	1,418	275	54,206	210,261

13.2b AGRICULTURE CREDIT: Number of Credits Received By Main Purpose of Credit and District During the 2002/03 Agriculture Year

District	Labour	Seeds	Fertilizers	Agro-chemicals	Tools / Equipment	Irrigation Structures	Livestock	Other	Total Credits
Nzega	282	418	975	829	407	0	150	446	3,508
Igunga	336	106	106	106	106	0	106	106	972
Uyui	0	3,043	7,419	5,028	105	206	105	308	16,214
Urambo	446	4,580	11,438	9,447	2,309	757	0	2,189	31,166
Sikonge	96	537	3,750	2,868	143	242	0	544	8,179
Tabora Urban	0	0	107	107	25	0	25	107	372
Total Credits	1,159	8,684	23,795	18,386	3,095	1,205	386	3,701	60,410

TREE FARMING AND AGROFORESTRY

14.1 ON FARM TREE PLANTING: Number of Planted Trees By Species and District During the 2002/03 Agriculture Year, Tabora Region

District	Senna Spp	Gravellia	Acacia Spp	Pinus Spp	Eucalyptus Spp	Melicia excelsa	Casurina Equisetifolia	Tectona Grandis	Terminalia Catapa	Terminalia Ivorensis	Leucena Spp	Syzgium Spp	Azadritachta Spp	Albizia Spp	Moringa Spp	Total
Nzega	1,201	5,599	119						576	144	1,474	751	3,068		895	13,828
Igunga	695	547									342		683		1,366	3,633
Uyui			98	633	29,003	633	197				10,557		308	0	42,229	83,659
Urambo	3,915		30,087								4,352		241	32,717	4,819	76,131
Sikonge	1,168	297	2,088	2,424				495		1,636					2,909	11,018
Tabora Urban	134										197			1,575	175	2,081
Total	7,114	6,443	32,393	3,058	29,003	633	197	495	576	1,780	16,922	751	4,300	34,292	52,394	190,349

14.2 TREE FARMING: Number of Households with Planted Trees on their Land and Number of Trees by**Planting Location and District During the 2002/03 Agriculture Year, Tabora District**

District	Mostly on Field / Plot Boundaries		Mostly Scattered in Field		Mostly in Plantation / Coppice		Total	
	Number of Households	Number of Trees	Number of Households	Number of Trees	Number of Households	Number of Trees	Number of Households	Number of Trees
Nzega	1,280	8,485	291	5,343	0		1,570	13,828
Igunga	223	888	344	2,744	0		567	3,633
Uyui	204	1,562	418	50,425	211	31,672	833	83,659
Urambo	483	7,005	0		741	69,127	1,224	76,131
Sikonge	50	198	198	2,577	97	8,242	345	11,018
Tabora Urban	47	1,709	33	372	0		80	2,081
Total	2,285	19,847	1,284	61,461	1,049	109,041	4,619	190,349

14.4 TREE FARMING: Number of Agriculture Households Classified By Distance to Community Planted Forest (Km) By District During the 2002/03 Agriculture Year, Tabora Region

District	Distance to Community Planted Forest (km)						Total
	0-9	1-19	05-29	30-39	40-49	60+	
Nzega	4,115	1,197	0	296	0	0	5,609
Igunga	693	1,839	2,072	577	0	106	5,288
Uyui	626	0	98	0	0	0	724
Urambo	5,532	829	2,040	1,070	251	1,374	11,096
Sikonge	149	744	727	98	0	99	1,817
Tabora Urban	692	507	157	105	157	367	1,984
Total	11,807	5,116	5,094	2,146	408	1,946	26,518

14.3 TREE FARMING: Number of Responses by Main Use of Trees By District and District for the 2002/03 Agriculture Year, Tabora Region

District	Main Use						Total
	Planks / Timber	Poles	Fuel for Wood	Shade	Medicinal	Other	
Nzega	288	147	1,248	419	0	294	2,397
Igunga	0	0	0	453	0	114	567
Uyui	0	106	210	295	103	422	1,135
Urambo	0	0	983	241	0	241	1,465
Sikonge	98	0	97	149	0	98	442
Tabora Urban	0	0	47	20	0	13	80
Total	386	252	2,585	1,576	103	1,183	6,085

14.5 TREE FARMING: Number of Responses by Second Use of Planted Trees and District for the 2002/03 Agriculture Year, Tabora Region

District	Second Use							Total
	Planks / Timber	Poles	Charcoal	Fuel for Wood	Shade	Medicinal	Other	
Nzega	150	0	0	297	942	588	419	2,397
Igunga	0	0	0	453	0	114	0	567
Uyui	0	106	0	415	207	197	106	1,030
Urambo	126	371	126	120	362	241	118	1,465
Sikonge	0	50	0	48	196	48	99	442
Tabora Urban	0	0	0	20	47	13	0	80
Total	277	526	126	1,353	1,754	1,202	742	5,980

CROP EXTENSION

15.1 CROP EXTENSION" Number of Agriculture Households Receiving Extension Messages By District During the 2002/03 Agriculture Year, Tabora Region

	Households Receiving		Households Not		Total
	Number	%	Number	%	
Nzega	15,560	24	50,006	76	65,566
Igunga	8,662	19	36,479	81	45,141
Uyui	12,311	30	29,006	70	41,318
Urambo	13,710	25	40,411	75	54,120
Sikonge	5,173	27	14,341	73	19,514
Tabora Urban	7,539	73	2,719	27	10,258
Total	62,956	27	172,961	73	235,917

15.2 CROP EXTENSION: Number of Households By Quality of Extension Services and District District During the 2002/03 Agriculture Year, Tabora Region

	Very Good		Good		Average		Poor		No Good		Total Number of Households
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,862	12	9,464	61	3,339	21	749	5	147	1	15,560
Igunga	1,608	19	5,819	67	1,125	13	0	0	109	1	8,662
Uyui	2,533	21	7,914	64	1,656	13	106	1	102	1	12,311
Urambo	2,540	20	7,746	60	2,296	18	242	2	0	0	12,824
Sikonge	719	14	3,596	70	760	15	50	1	0	0	5,124
Tabora Urban	284	4	5,910	79	1,107	15	214	3	0	0	7,516
Total	9,547	15	40,449	65	10,282	17	1,361	2	358	1	61,997

15.3 CROP EXTENSION MESSAGES: Number of Agriculture Households By Source of Crop Extension Messages and District During the 2002/03 Agriculture Year, Tabora Region

District	Government		NGO / Development		Cooperative		Large Scale Farm		Other		Not applicable		Total Number
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	14,157	91	984	6	119	1	150	1	0	0	150	1	15,560
Igunga	8,436	99	0	0	0	0	116	1	0	0	0	0	8,552
Uyui	8,845	72	2,199	18	1,267	10	0	0	0	0	0	0	12,311
Urambo	6,885	54	4,119	32	1,483	12	96	1	118	1	0	0	12,701
Sikonge	3,716	72	1,125	22	93	2	192	4	0	0	46	1	5,173
Tabora Urban	7,237	97	40	1	0	0	26	0	160	2	25	0	7,488
Total	49,275	80	8,468	14	2,962	5	581	1	278	0	222	0	61,785

15.4 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Plant Spacing By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Spacing						Total Received Advice	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	13,888	844	0	150	0	150	15,032	65,566	23
Igunga	8,321	0	0	116	0	0	8,436	45,025	19
Uyui	8,113	2,095	1,267	0	0	0	11,475	41,212	28
Urambo	6,297	4,119	1,483	96	118	0	12,113	54,120	22
Sikonge	3,474	978	93	143	0	0	4,688	19,464	24
Tabora Urban	6,400	40	0	0	26	25	6,492	10,233	63
Total	46,493	8,075	2,843	505	144	175	58,236	235,621	25
%	80	14	5	1	0	0	100		

15.5 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Agrochemical By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Use of Agrochemicals						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	6,243	1,088	0	150	0	0	7,481	65,566	11
Igunga	5,511	106	0	0	0	0	5,617	45,025	12
Uyui	6,046	2,614	1,161	0	0	0	9,821	41,212	24
Urambo	1,759	4,926	222	96	590	126	7,719	54,120	14
Sikonge	2,329	1,023	99	148	0	50	3,649	19,464	19
Tabora Urban	4,079	40	0	0	239	27	4,385	10,233	43
Total	25,967	9,798	1,483	394	829	202	38,673	235,621	16
%	67	25	4	1	2	1	100		

15.6 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Erosion Control By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Erosion Control						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	3,083	571	0	0	0	150	3,804	65,566	6
Igunga	1,453	0	0	0	0	106	1,559	45,025	3
Uyui	3,011	1,048	211	0	0	0	4,270	41,212	10
Urambo	1,422	1,095	115	0	0	251	2,882	54,120	5
Sikonge	2,021	149	50	50	0	50	2,319	19,464	12
Tabora Urban	2,713	0	0	52	53	27	2,845	10,233	28
Total	13,703	2,862	376	102	53	583	17,680	235,621	8
%	78	16	2	1	0	3	100		

**15.7 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Organic Fertilizer Use By Source and District
During the 2002/03 Agriculture Year, Tabora Region**

District	Organic Fertilizer Use						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	11,085	150	119	269	0	0	11,623	65,566	18
Igunga	6,951	0	0	116	0	343	7,410	45,025	16
Uyui	5,410	940	106	0	0	106	6,560	41,212	16
Urambo	4,433	973	193	0	244	251	6,093	54,120	11
Sikonge	2,069	333	50	149	0	50	2,650	19,464	14
Tabora Urban	3,379	25	0	26	266	54	3,751	10,233	37
Total	33,326	2,421	467	560	511	802	38,087	235,621	16
%	88	6	1	1	1	2	100		

**15.8 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Inorganic Fertilizer Use By Source and District
During the 2002/03 Agriculture Year, Tabora Region**

District	Inorganic Fertilizer Use						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	5,445	690	0	150	0	0	6,285	65,566	10
Igunga	4,358	212	0	0	0	220	4,790	45,025	11
Uyui	5,329	3,253	1,267	0	0	0	9,849	41,212	24
Urambo	2,462	6,101	96	332	590	244	9,826	54,120	18
Sikonge	1,590	1,415	149	149	0	146	3,449	19,464	18
Tabora Urban	3,446	67	0	0	293	25	3,831	10,233	37
Total	22,631	11,739	1,512	631	883	635	38,030	235,621	16
%	60	31	4	2	2	2	100		

**15.9 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Use of Improved Seeds By Source and District
During the 2002/03 Agriculture Year, Tabora Region**

District	Use of Improved Seed						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	8,453	1,941	0	150	0	0	10,544	65,566	16
Igunga	6,051	106	0	0	0	231	6,387	45,025	14
Uyui	5,900	2,722	950	106	0	211	9,889	41,212	24
Urambo	3,891	4,546	220	96	236	126	9,115	54,120	17
Sikonge	2,899	636	50	98	0	0	3,683	19,464	19
Tabora Urban	3,014	67	27	0	400	0	3,508	10,233	34
Total	30,207	10,018	1,247	450	636	568	43,126	235,621	18
%	70	23	3	1	1	1	100		

15.10 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Mechanization/LST By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Mechanisation / LST						Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Large Scale Farm	Other	Not applicable	Total		
Nzega	738	0	0	0	150	888	65,566	1
Igunga	1,026	0	0	0	115	1,141	45,025	3
Uyui	418	0	0	0	211	629	41,212	2
Urambo	613	124	96	0	363	1,197	54,120	2
Sikonge	245	0	50	50	0	344	19,464	2
Tabora Urban	926	0	0	0	0	926	10,233	9
Total	3,966	124	146	50	839	5,124	235,621	2
%	77	2	3	1	16	100		

15.11 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Irrigation Technology By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Irrigation Technology						Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Large Scale Farm	Other	Not applicable	Total		
Nzega	2,519	147	300	0	0	2,966	65,566	5
Igunga	1,838	0	0	0	115	1,953	45,025	4
Uyui	2,715	104	0	0	211	3,030	41,212	7
Urambo	797	738	0	0	125	1,660	54,120	3
Sikonge	594	198	50	0	50	891	19,464	5
Tabora Urban	1,665	0	0	134	54	1,853	10,233	18
Total	10,128	1,187	350	134	554	12,353	235,621	5
%	82	10	3	1	4	100		

15.12 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Crop Storage By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Crop Storage						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	6,739	1,096	0	1,170	300	149	9,455	65,566	14
Igunga	6,034	575	0	0	0	114	6,723	45,025	15
Uyui	7,188	419	528	0	0	0	8,134	41,212	20
Urambo	3,597	1,831	230	0	0	118	5,776	54,120	11
Sikonge	2,454	438	0	50	0	99	3,040	19,464	16
Tabora Urban	6,092	13	0	79	133	0	6,317	10,233	62
Total	32,104	4,373	758	1,298	433	480	39,445	235,621	17
%	81	11	2	3	1	1	100		

15.13 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Vermin Control By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Vermin Control						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Not applicable				
Nzega	1,034	0	0	0	269	1,303	65,566	2	
Igunga	1,213	0	0	0	0	1,213	45,025	3	
Uyui	4,992	103	106	0	0	5,200	41,212	13	
Urambo	986	1,101	96	347	369	2,900	54,120	5	
Sikonge	1,162	0	0	198	50	1,410	19,464	7	
Tabora Urban	2,418	27	0	27	103	2,575	10,233	25	
Total	11,805	1,230	202	572	791	14,601	235,621	6	
%	81	8	1	4	5	100			

15.14 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Agro-processing By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Agro-progressing						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	2,114	300	0	2,904	269	0	5,588	65,566	9
Igunga	1,110	0	0	0	0	0	1,110	45,025	2
Uyui	1,215	105	211	0	0	317	1,848	41,212	4
Urambo	483	377	0	251	0	356	1,467	54,120	3
Sikonge	680	385	50	50	0	50	1,213	19,464	6
Tabora Urban	4,777	27	0	79	267	24	5,173	10,233	51
Total	10,380	1,194	260	3,283	536	746	16,400	235,621	7
%	63	7	2	20	3	5	100		

15.15 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Agro-forestry By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Agro-forestry						Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Other	Not applicable			
Nzega	2,900	928	0	0	0	0	3,829	65,566	6
Igunga	1,757	0	0	0	0	0	1,757	45,025	4
Uyui	2,918	312	106	0	0	0	3,336	41,212	8
Urambo	1,093	471	220	118	472	240	2,614	54,120	5
Sikonge	682	96	0	99	0	50	927	19,464	5
Tabora Urban	1,725	54	0	0	54	0	1,832	10,233	18
Total	11,076	1,861	326	217	526	290	14,295	235,621	6
%	77	13	2	2	4	2	100		

15.16 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Beekeeping By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Beekeeping						Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Large Scale Farm	Other	Not applicable	Total		
Nzega	297	0	0	0	0	297	65,566	0
Igunga	116	0	0	0	0	116	45,025	0
Uyui	838	211	0	0	0	1,049	41,212	3
Urambo	357	239	0	244	243	1,083	54,120	2
Sikonge	694	140	99	0	0	934	19,464	5
Tabora Urban	239	75	27	0	0	341	10,233	3
Total	2,541	665	126	244	243	3,819	235,621	2
%	67	17	3	6	6	100		

15.17 CROP EXTENSION MESSAGES: Number of Agriculture Households Receiving Advice on Fish Farming By Source and District During the 2002/03 Agriculture Year, Tabora Region

District	Fish Farming					Total	Total Number of Household	% of Total Number of Household
	Government	NGO / Development Project	Cooperative	Large Scale Farm	Not applicable			
Nzega	447	519	0	0	0	966	65,566	1
Igunga	106	115	0	0	0	221	45,025	0
Uyui	0	0	0	0	0	0	41,212	0
Urambo	249	0	124	0	243	615	54,120	1
Sikonge	446	92	0	99	50	687	19,464	4
Tabora Urban	105	0	0	26	0	131	10,233	1
Total	1,353	726	124	125	292	2,620	235,621	1
%	52	28	5	5	11	100		

**15.18 EXTENSION MESSAGES: Number of Agriculture Households By Receiving and Adopting Extension Messages By Type of Message and District (Part 1)
During the 2002/03 Agriculture Year, Tabora Region**

District	Spacing			Use of Agrochemicals			Erosion Control			Organic Fertilizer Use		
	Received	Adopted e	%	Received	Adopted	%	Received	Adopted	%	Received	Adopted	%
Nzega	14,612	10,942	75	7,031	4,465	64	3,322	1,397	42	11,337	8,274	73
Igunga	8,436	7,308	87	5,617	2,500	45	1,339	671	50	7,296	4,277	59
Uyui	11,577	10,733	93	9,821	7,345	75	4,165	2,193	53	6,349	3,139	49
Urambo	12,231	12,001	98	7,837	6,464	82	2,635	1,200	46	5,605	2,630	47
Sikonge	4,688	3,918	84	3,649	2,916	80	2,175	1,410	65	2,650	1,549	58
Tabora Urban	6,547	5,915	90	4,331	3,349	77	2,820	2,312	82	3,672	2,558	70
Total	58,092	50,816	87	38,287	27,040	71	16,455	9,183	56	36,909	22,427	61

**15.19 EXTENSION MESSAGES: Number of Agriculture Households By Receiving and Adopting Extension Messages By Type of Message and District (Part 2)
During the 2002/03 Agriculture Year, Tabora Region**

District	Inorganic Fertilizer Use			Use of Improved Seed			Mechanisation / LST			Irrigation Technology		
	Received	Adopted	%	Received	Adopted	%	Received	Adopted	%	Received	Adopted	%
Nzega	6,144	2,303	37	10,544	5,763	55	738	0	0	2,816	1,779	63
Igunga	4,456	1,681	38	6,387	2,373	37	1,035	221	21	1,721	1,606	93
Uyui	9,951	7,137	72	9,995	4,712	47	312	0	0	2,721	2,087	77
Urambo	9,708	8,984	93	8,993	7,708	86	707	118	17	1,535	1,330	87
Sikonge	3,399	2,917	86	3,585	3,090	86	198	50	25	744	545	73
Tabora Urban	3,772	2,271	60	3,482	1,946	56	900	27	3	1,641	1,112	68
Total	37,431	25,294	68	42,985	25,592	60	3,890	415	11	11,177	8,460	76

**15.20 EXTENSION MESSAGES: Number of Agriculture Households By Receiving and Adopting Extension Messages By Type of Message and District (Part 3)
During the 2002/03 Agriculture Year, Tabora Region**

District	Crop Storage			Vermin Control			Agro-progressing			Agro-forestry		
	Received	Adopted	%	Received	Adopted	%	Received	Adopted	%	Received	Adopted	%
Nzega	9,455	7,937	84	884	587	66	5,469	4,962	91	3,829	1,030	27
Igunga	6,609	5,485	83	1,213	780	64	994	765	77	1,749	983	56
Uyui	7,923	7,398	93	4,989	4,472	90	1,326	1,856	140	3,230	938	29
Urambo	5,654	4,566	81	2,539	2,646	104	1,106	1,111	100	2,386	731	31
Sikonge	3,040	2,524	83	1,361	1,113	82	1,164	732	63	976	739	76
Tabora Urban	6,237	6,054	97	2,190	2,323	106	5,117	4,856	95	1,324	583	44
Total	38,918	33,964	87	13,175	11,920	90	15,177	14,281	94	13,494	5,004	37

15.21 EXTENSION MESSAGES: Number of Agriculture Households By Receiving and Adopting Extension Messages By Type of Message and District (Part 4) During the 2002/03 Agriculture Year, Tabora Region

District	Beekeeping			Fish Farming		
	Received	Adopted	%	Received	Adopted	%
Nzega	297	0	0	966	0	0
Igunga	0	0	0	0	0	0
Uyui	421	316	75	0	0	0
Urambo	598	598	100	124	0	0
Sikonge	934	643	69	492	248	50
Tabora Urban	128	77	60	53	26	50
Total	2,378	1,635	69	1,634	274	17

ANIMAL CONTRIBUTION TO CROP PRODUCTION

17.1 ANIMAL CONTRIBUTION TO CROP PRODUCTION: Number of Agriculture Households Using Draft Animal to Cultivate Land By District During 2002/03 Agriculture Year, Tabora Region

District	Using Draft Animals		Not Using Draft Animals		Total Households
	Number of Households	%	Number of Households	%	
Nzega	34,629	53	30,937	47	65,566
Igunga	34,913	77	10,228	23	45,141
Uyui	9,192	22	32,126	78	41,318
Urambo	5,525	10	48,595	90	54,120
Sikonge	3,754	19	15,760	81	19,514
Tabora Urban	849	8	9,409	92	10,258
Total	88,862	38	147,055	62	235,917

17.2 ANIMAL CONTRIBUTION TO CROP PRODUCTION: Type of Draft Animal By Number Owned, Used and Area Cultivated (Acres) By District During 2002/03 Agriculture Year, Tabora Region

District	Type of Craft					
	Oxen			Total		
	Number Owned	Number Used	Area Cultivated (Acres)	Number Owned	Number Used	Area Cultivated (Acres)
Nzega	83,769	120,742	155,244	83,769	120,742	155,244
Igunga	102,641	162,466	277,122	102,641	162,466	277,122
Uyui	34,417	42,341	63,200	34,417	42,341	63,200
Urambo	14,865	25,202	24,585	14,865	25,202	24,585
Sikonge	12,227	15,992	28,100	12,227	15,992	28,100
Tabora Urban	3,381	3,752	4,728	3,381	3,752	4,728
Total	251,299	370,494	552,978	251,299	370,494	552,978

17.3 ANIMAL CONTRIBUTION TO CROPS: Number of Crop Growing Households Using Organic Fertilizer By District During 2002/03 Agriculture Year, Tabora Region

District	Using Organic Fertilizer		Not Using Organic Fertilizer		Total Number of Crop Growing Households
	Number	%	Number	%	
Nzega	30,698	45	34,868	21	65,566
Igunga	11,351	17	33,791	20	45,141
Uyui	8,867	13	31,727	19	40,594
Urambo	10,884	16	42,391	26	53,275
Sikonge	3,959	6	15,555	9	19,514
Tabora Urban	2,746	4	7,407	4	10,154
Total	68,504	100	165,739	100	234,244

17.4 ANIMAL CONTRIBUTION TO CROPS: Area of Farm Yard Manure and Compost Application By District During 2002/03 Agriculture Year, Tabora Region

District	Farm Yard Manure Area Applied		Compost Area Applied		Total Area Applied with Organic Fertilizers	
	Area (Ha)	%	Area (Ha)	%	Area (Ha)	(%)
Nzega	26,328	41	1,713	24	28,042	39
Igunga	11,737	18	537	7	12,274	17
Uyui	8,880	14	732	10	9,612	13
Urambo	8,972	14	4,104	57	13,075	18
Sikonge	5,695	9	84	1	5,779	8
Tabora Urban	2,803	4	60	1	2,863	4
Total	64,415	100	7,230	100	71,645	100

CATTLE PRODUCTION

18.1 CATTLE PRODUCTION: Total Number of Households Rearing Cattle By District During 2002/03 Agriculture Year, Tabora Region

District	Households Rearing Cattle		Households Not Rearing Cattle		Total Agriculture Households	Total Number of Agricultural Households Rearing Livestock
	Number	%	Number	%		
Nzega	22,876	35	42,690	65	65,566	27,645
Igunga	21,452	48	23,689	52	45,141	23,588
Uyui	9,429	23	31,889	77	41,318	14,758
Urambo	6,624	12	47,496	88	54,120	13,740
Sikonge	4,275	22	15,238	78	19,514	5,837
Tabora Urban	1,269	12	8,989	88	10,258	2,302
Total	65,925	28	169,992	72	235,917	87,871

18.3 CATTLE PRODUCTION: Number of Households Rearing Cattle, Head of Cattle and Average Head per Household by Herd Size; on 1st October 2003

Herd Size	Cattle Rearing Households		Heads of Cattle		Average Number per Household
	Number	%	Number	%	
1-5	15,840	24	52,711	3	3
6-10	12,660	19	100,927	6	8
11-15	9,495	14	121,805	8	13
16-20	7,284	11	133,088	8	18
21-30	9,097	14	234,411	15	26
31-40	3,459	5	129,682	8	37
41-50	2,359	4	108,258	7	46
51-60	839	1	47,044	3	56
61-100	3,506	5	288,935	18	82
101-150	605	1	73,633	5	122
151+	782	1	278,198	18	356
Total	65,925	100	1,568,691	100	24

18.4 CATTLE PRODUCTION: Number of Cattle by Category and Type of Cattle; on 1st October 2003

Category of Cattle	Indigenous Cattle		Improved Beef Cattle		Improved Dairy Cattle		Total Cattle	
	Number	%	Number	%	Number	%	Number	%
Bulls	204,261	100.0	0	0.0	46	0.0	204,307	13.0
Cows	488,048	99.8	0	0.0	1,089	0.2	489,137	31.2
Steers	259,614	99.7	671	0.3	0	0.0	260,285	16.6
Heifers	274,899	99.9	0	0.0	345	0.1	275,243	17.5
Male Calves	150,648	100.0	0	0.0	46	0.0	150,694	9.6
Female Calves	188,699	99.8	0	0.0	325	0.2	189,024	12.0
Total	1,566,169	99.8	671	0.0	1,851	0.1	1,568,691	100.0

18.2 CATTLE PRODUCTION: Total Number of Cattle By Type and District as of 1st October, 2003

District	Indigenous			Improved Beef			Improved Dairy			Total Cattle		
	Number of Households	Number of Cattle	%	Number of Households	Number of Cattle	%	Number of Households	Number of Cattle	%	Number of Households	Number of Cattle	%
Nzega	22,876	424,721	99.9	150	300	0.1	0	0	0.0	22,876	425,021	27.1
Igunga	21,452	465,399	99.7	0	0	0.0	115	1,493	0.3	21,452	466,892	29.8
Uyui	9,429	205,865	100.0	0	0	0.0	0	0	0.0	9,429	205,865	13.1
Urambo	6,624	130,629	99.7	124	371	0.3	0	0	0.0	6,624	131,000	8.4
Sikonge	4,229	271,820	99.9	0	0	0.0	96	279	0.1	4,275	272,100	17.3
Tabora Urban	1,244	67,734	99.9	0	0	0.0	52	79	0.1	1,269	67,812	4.3
Total	65,854	1,566,169	99.8	274	671	0.0	262	1,851	0.1	65,925	1,568,691	100.0

18.5 CATTLE PRODUCTION: Number of Indigenous Cattle By Category and District as on 1st October, 2003

District	Category - Indigenous						
	Bulls	Cows	Steers	Heifers	Male Calves	Female Calves	Total
Nzega	49,505	130,919	82,744	72,958	38,799	49,797	424,721
Igunga	40,747	160,218	102,951	64,432	45,213	51,839	465,399
Uyui	25,178	65,451	34,556	32,588	22,476	25,615	205,865
Urambo	16,505	40,744	20,445	20,860	15,359	16,716	130,629
Sikonge	67,715	64,890	13,808	66,392	23,469	35,547	271,820
Tabora Urban	4,611	25,827	5,111	17,669	5,333	9,184	67,734
Total	204,261	488,048	259,614	274,899	150,648	188,699	1,566,169

18.6 CATTLE PRODUCTION: Number of Beef Cattle By Category and District as on 1st October, 2003

District	Category - Improved Beef Cattle						
	Bulls	Cows	Steers	Heifers	Male Calves	Female Calves	Total
Nzega	.	.	300	.	.	.	300
Igunga
Uyui
Urambo	.	.	371	.	.	.	371
Sikonge
Tabora Urban
Total	.	.	671	.	.	.	671

18.7 CATTLE PRODUCTION: Number of Dairy Cattle By Category and District as on 1st October, 2003

District	Category - Improved Dairy Cattle						Total
	Bulls	Cows	Steers	Heifers	Male Calves	Female Calves	
Nzega							
Igunga		919		345		230	1,493
Uyui							
Urambo							
Sikonge	46	92			46	96	279
Tabora Urban		79					79
Total	46	1,089		345	46	325	1,851

18.8 CATTLE PRODUCTION: Total Number of Cattle By Category and District as on 1st October, 2003

District	Total Cattle						Total
	Bulls	Cows	Steers	Heifers	Male Calves	Female Calves	
Nzega	49,505	130,919	83,044	72,958	38,799	49,797	425,021
Igunga	40,747	161,137	102,951	64,776	45,213	52,069	466,892
Uyui	25,178	65,451	34,556	32,588	22,476	25,615	205,865
Urambo	16,505	40,744	20,816	20,860	15,359	16,716	131,000
Sikonge	67,761	64,982	13,808	66,392	23,515	35,642	272,100
Tabora Urban	4,611	25,905	5,111	17,669	5,333	9,184	67,812
Total	204,307	489,137	260,285	275,243	150,694	189,024	1,568,691

GOATS PRODUCTION

19.1 GOAT PRODUCTION: Total Number of Goats by Goat Type and District as on 1st October, 2003

District	Indigenous			Improved for Meat			Improved Dairy			Total Goat	
	Number of Households	Number of Goat	%	Number of Households	Number of Goat	%	Number of Households	Number of Goat	%	Number of Households	Number of Goat
Nzega	17,692	183,820	99	150	901	0.5	300	451	0.2	17,692	185,172
Igunga	17,664	230,075	98	338	1,825	0.8	453	2,177	0.9	17,664	234,077
Uyui	11,852	121,592	97	516	1,558	1.2	512	1,849	1.5	11,852	124,998
Urambo	11,777	91,975	98	370	1,349	1.4	126	502	0.5	11,777	93,826
Sikonge	3,998	53,445	99	99	347	0.6	49	296	0.5	3,998	54,087
Tabora Urban	2,184	26,288	98	0	.	0.0	104	547	2.0	2,184	26,836
Total	65,167	707,195	98	1,473	5,979	0.8	1,543	5,821	0.8	65,167	718,996

19.2 GOAT PRODUCTION: Number of Households Rearing Goats and Head of Goats by Herd Size on 1st October 2003

Herd Size	Goat Rearing Households		Head of Goats		Average Per Household
	Number	%	Number	%	
1-4	15,561	23.9	43,747	6	3
5-9	21,112	32.4	138,722	19	7
10-14	13,399	20.6	154,144	21	12
15-19	5,930	9.1	98,153	14	17
20-24	4,395	6.7	92,037	13	21
25-29	930	1.4	25,191	4	27
30-39	1,651	2.5	53,884	7	33
40+	2,188	3.4	113,118	16	52
Total	65,167	100.0	718,996	100	11

19.3 GOAT PRODUCTION: Total Number of Goats by Category and Type of Goat on 1st October, 2003

Category of Goats	Indigenous Goats		Improved Meat Goats		Improved Dairy Goats		Total Goat	
	Number	%	Number	%	Number	%	Number	%
Billy Goat	118,728	98.7	793	0.7	766	0.6	120,287	17
Castrated Goat	35,905	88.4	2,192	5.4	2,505	6.2	40,602	6
She Goat	361,261	99.4	1,019	0.3	1,338	0.4	363,619	51
Male Kid	88,817	98.2	1,146	1.3	522	0.6	90,485	13
She Kid	102,484	98.5	828	0.8	691	0.7	104,003	14
Total	707,195	98.4	5,979	0.8	5,821	0.8	718,996	100

19.4 GOAT PRODUCTION: Number of Indigenous Goat by Category and District on 1st October, 2003

District	Number of Indigenous Goats					
	Billy Goat	Castrated Goat	She Goat	Male Kid	She Kid	Total
Nzega	29,304	10,183	96,015	20,218	28,099	183,820
Igunga	35,784	13,767	117,179	30,866	32,478	230,075
Uyui	21,994	5,629	59,806	17,051	17,112	121,592
Urambo	17,784	3,378	48,730	10,071	12,013	91,975
Sikonge	10,210	2,007	25,555	7,205	8,468	53,445
Tabora Urban	3,651	941	13,977	3,405	4,315	26,288
Total	118,728	35,905	361,261	88,817	102,484	707,195

19.5 GOAT PRODUCTION: Number of Improved Meat Goat by Category and District on 1st October, 2003

District	Number of Improved Meat Goats					
	Billy Goat	Castrated Goat	She Goat	Male Kid	She Kid	Total
Nzega	.	901	.	.	.	901
Igunga	695	.	914	216	.	1,825
Uyui	98	616	105	633	106	1,558
Urambo	.	626	.	.	723	1,349
Sikonge	.	50	.	297	.	347
Tabora Urban
Total	793	2,192	1,019	1,146	828	5,979

19.6 GOAT PRODUCTION: Number of Improved Dairy Goat by Category and District as of 1st October, 2003

District	Number of Improved Dairy Goats					
	Billy Goat	Castrated Goat	She Goat	Male Kid	She Kid	Total
Nzega	150	300	.	.	.	451
Igunga	.	1,838	.	.	338	2,177
Uyui	512	205	632	199	299	1,849
Urambo	.	.	502	.	.	502
Sikonge	.	.	.	296	.	296
Tabora Urban	103	161	204	26	53	547
Total	766	2,505	1,338	522	691	5,821

19.7 GOAT PRODUCTION: Total Number of Goat by Category and District as of 1st October, 2003

District	Total Goat					
	Billy Goat	Castrated Goat	She Goat	Male Kid	She Kid	Total
Nzega	29,455	11,385	96,015	20,218	28,099	185,172
Igunga	36,479	15,606	118,094	31,082	32,816	234,077
Uyui	22,604	6,450	60,543	17,884	17,516	124,998
Urambo	17,784	4,003	49,232	10,071	12,735	93,826
Sikonge	10,210	2,056	25,555	7,798	8,468	54,087
Tabora Urban	3,754	1,102	14,180	3,431	4,368	26,836
Total	120,287	40,602	363,619	90,485	104,003	718,996

SHEEP PRODUCTION

20.1 SHEEP PRODUCTION: Total Number of Sheep By Breed Type on 1st October 2002/03

Breed	Number of Indigenous Sheep		Number of Improved Mutton Sheep		Total Sheep	
	Number	%	Number	%	Number	%
Ram	37,225	62	22,459	38	59,684	25
Castrated Sheep	3,721	82	828	18	4,549	2
She Sheep	110,926	98	2,042	2	112,969	48
Male Lamb	25,454	93	1,841	7	27,295	12
She Lamb	29,269	95	1,448	5	30,717	13
Total	206,595	88	28,618	12	235,213	100

20.2 Number of Households Raising or Managing Sheep by District on 1st October 2003

District	Households Raising Sheep		Households Not Raising Sheep		Number of Agriculture Households	Total Livestock Keeping Households
	Number	%	Number	%		
Nzega	7,912	12	57,654	88	65,566	27,645
Igunga	10,454	23	34,687	77	45,141	23,588
Uyui	5,082	12	36,235	88	41,318	14,758
Urambo	1,826	3	52,294	97	54,120	13,740
Sikonge	2,016	10	17,498	90	19,514	5,837
Tabora Urban	836	8	9,422	92	10,258	2,302
Total	28,126	12	207,790	88	235,917	87,871

20.3 Number of Sheep by Type of Sheep and District as of 1st October, 2002/03

District	Number of Indigenous		Number of Improved for Mutton		Total Sheep	
	Number	%	Number	%	Number	%
Nzega	40,616	96	1,502	4	42,118	18
Igunga	98,197	97	3,373	3	101,570	43
Uyui	38,240	63	22,107	37	60,347	26
Urambo	5,076	84	943	16	6,019	3
Sikonge	19,410	98	428	2	19,838	8
Tabora Urban	5,056	95	265	5	5,321	2
Total	206,595	88	28,618	12	235,213	100

20.4 Number of Sheep per Household by District as of 1st October 2003

District	Number of Indigenous	Number of Improved for Mutton	Total Number of Sheep	Total Household Raising Sheep	Average Sheep
Nzega	40,616	1,502	42,118	7,912	5
Igunga	98,197	3,373	101,570	10,454	10
Uyui	38,240	22,107	60,347	5,082	12
Urambo	5,076	943	6,019	1,826	3
Sikonge	19,410	428	19,838	2,016	10
Tabora Urban	5,056	265	5,321	836	6
Total	206,595	28,618	235,213	28,126	8

20.5 Number of Households and Heads of Sheep by Head Size on 1st October 2003

Head Size	Number of Households	%	Number of Sheep	%	Average Number Per Household
1-4	12,999	46	32,772	14	3
5-9	8,550	31	55,667	24	7
10-14	2,781	10	31,232	13	11
15-19	1,496	5	24,471	10	16
20-24	863	3	18,294	8	21
25-29	486	2	12,873	5	26
30-39	485	2	16,330	7	34
40+	367	1	43,573	19	119
Total	28,028	100	235,213	100	8

20.6 Total Number of Indigenous Sheep by Sheep Type and District on 1st October 2002

District	Number of Indigenous					
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	Total
Nzega	7,539	892	24,122	3,213	4,850	40,616
Igunga	14,347	1,535	53,264	13,999	15,052	98,197
Uyui	9,314	943	18,042	4,475	5,465	38,240
Urambo	844	.	3,268	474	490	5,076
Sikonge	4,091	138	9,916	2,484	2,781	19,410
Tabora Urban	1,089	213	2,314	809	631	5,056
Total	37,225	3,721	110,926	25,454	29,269	206,595

20.7 Total Number of Mutton Sheep by Sheep Type and District on 1st October 2002

District	Number of Improved for Mutton					
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	Total
Nzega	300	.	150	1,051	.	1,502
Igunga	927	232	1,288	232	695	3,373
Uyui	21,115	317	.	190	486	22,107
Urambo	118	.	472	236	118	943
Sikonge	.	279	.	.	149	428
Tabora Urban	.	.	132	133	.	265
Total	22,459	828	2,042	1,841	1,448	28,618

20.8 Total Number of Sheep by Sheep Type and District on 1st October 2002

District	Total Sheep					
	Ram	Castrated Sheep	She Sheep	Male Lamb	She Lamb	Total
Nzega	7,840	892	24,272	4,264	4,850	42,118
Igunga	15,274	1,767	54,552	14,230	15,747	101,570
Uyui	30,429	1,259	18,042	4,665	5,952	60,347
Urambo	962	.	3,740	710	608	6,019
Sikonge	4,091	418	9,916	2,484	2,930	19,838
Tabora Urban	1,089	213	2,446	942	631	5,321
Total	59,684	4,549	112,969	27,295	30,717	235,213

PIGS PRODUCTION

21.1 Number of Households and Pigs by Herd Size on 1st October 2003

Herd Size	Pig Rearing Households		Heads of Pigs		Number Per Household
	Number	%	Number	%	
1-4	2,386	91	4,076	65	2
5-9	106	4	739	12	7
10-14	123	5	1,471	23	12
Total	2,614	100	6,286	100	2

21.2 Number of Households and Pigs by District on 1st October 2003

District	Number of Household	Number of Pig	Average Number Per Household
Nzega	532	1,083	2
Uyui	106	739	7
Urambo	1,844	4,172	2
Tabora Urban	132	292	2
Total	2,614	6,286	2

21.3 Number of Pigs by Type of Pigs and District on 1st October, 2003

District	Boar	Castrated Male	Sow / Gilt	Male Piglet	She Piglet	Total
Nzega	413	119	551	.	.	1,083
Uyui	317	0	422	0	0	739
Urambo	1,612	.	1,098	729	733	4,172
Tabora Urban	54	.	81	106	52	292
Total	2,395	119	2,152	835	785	6,286

LIVESTOCK PESTS AND PARASITE CONTROL

22.1 PESTS AND PARASITES: Number of Livestock Rearing Households deworming Livestock by District During the 2002/03 Agriculture Year

District	Demworming Livestock		NOT Demworming Livestock		Total
	Number	%	Number	%	
Nzega	8,133	29	19,512	71	27,645
Igunga	10,622	46	12,621	54	23,243
Uyui	3,511	26	10,122	74	13,634
Urambo	5,587	41	7,910	59	13,497
Sikonge	1,070	19	4,668	81	5,738
Tabora Urban	1,103	49	1,162	51	2,265
Total	30,028	35	55,995	65	86,022

22.2 PESTS AND PARASITES: Number of Livestock Rearing Households dewormed Livestock by Type of Livestock and District During the 2002/03 Agriculture Year

District	Dewormed Cattles		Dewormed Goats		Dewormed Sheep		Dewormed Pigs	
	Number	%	Number	%	Number	%	Number	%
Nzega	6,237	28	3,085	28	868	21	720	19
Igunga	9,316	42	2,918	27	1,212	29	972	26
Uyui	1,440	6	1,235	11	737	18	1,468	39
Urambo	3,865	17	2,224	20	489	12	360	10
Sikonge	732	3	683	6	396	10	48	1
Tabora Urban	581	3	767	7	426	10	150	4
Total	22,172	100	10,913	100	4,127	100	3,717	100

22.3 PESTS AND PARASITE: Number and Percent of agricultural households reporting to have encountered tick problems during 2002/03 Agriculture Year by District, 2002/03 Agricultural Year

District	Tick Problems		No Tick Problems		Total
	No. of Households	%	No. of Households	%	
Nzega	17,269	63	9,955	37	27,224
Igunga	16,662	75	5,609	25	22,271
Uyui	7,612	55	6,127	45	13,739
Urambo	6,805	50	6,688	50	13,493
Sikonge	3,081	56	2,432	44	5,513
Tabora Urban	847	39	1,323	61	2,171
Total	52,275	62	32,135	38	84,410

22.4 LIVESTOCK PESTS AND PARASITE CONTROL: Number and Percent of agricultural households by Method of Tick Control during 2002/03 Agriculture Year and District, 2002/03 Agricultural Year

District	Method of Tick Control										Total
	None		Spraying		Dipping		Smearing		Other		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	3,857	22	7,993	46	2,605	15	300	2	2,514	15	17,269
Igunga	4,094	25	9,841	59	1,718	10	114	1	894	5	16,662
Uyui	2,115	28	3,357	44	632	8	890	12	617	8	7,612
Urambo	1,903	28	3,340	49	96	1	855	13	611	9	6,805
Sikonge	1,154	37	714	23	297	10	634	21	280	9	3,081
Tabora Urban	187	22	502	59	106	13	53	6	0	0	847
Total	13,310	25	25,747	49	5,455	10	2,847	5	4,916	9	52,275

OTHER LIVESTOCK

23a OTHER LIVESTOCK: Total Number of Other Livestock by Type as of 1st October 2003

Type	Chicken		Others	
	Number	%	Type	Number
Indigenous Chicken	2,498,191	99.63	Ducks	57,565
Layer	3,949	0.16	Turkeys	1,830
Broiler	5,330	0.21	Rabbits	7,171
		0.00	Donkeys	26,294
Total	2,507,469	100.00		92,861

23b OTHER LIVESTOCK: Number of households with chicken and Category of Chicken by District

District	Chicken Type			
	Indigenous Chicken	Layer	Broiler	Total Number of Chicken
Nzega	492,529	3,522	438	496,490
Igunga	359,944	109	811	360,864
Uyui	579,747	317	2,740	582,803
Urambo	646,320	.	1,242	647,562
Sikonge	341,473	.	99	341,572
Tabora Urban	78,178	.	.	78,178
Total	2,498,191	3,949	5,330	2,507,469

23c OTHER LIVESTOCK: Total Number of Households and Chickens raised by Flock Size as of 1st October 2003

Flock Size	Number of Households	%	Number of Chicken	Average Chicken by Households
1 - 4	28,432	17	83,765	3
5 - 9	46,552	28	309,940	7
10 - 19	50,056	30	645,709	13
20 - 29	23,087	14	517,953	22
30 - 39	9,792	6	312,264	32
40 - 49	4,126	2	173,702	42
50 - 99	4,771	3	289,704	61
100+	477	0	174,432	365
Total	167,294	100	2,507,469	15

23d OTHER LIVESTOCK: Head Number of Other Livestock by Type of Livestock and District

District	Type of Livestock				
	Ducks	Turkeys	Rabbits	Donkeys	Other
Nzega	12,653	890	0	1,197	901
Igunga	5,420	656	0	11,055	341
Uyui	27,042	0	633	13,896	1,019
Urambo	9,171	0	6,438	0	2,552
Sikonge	2,129	285	99	146	0
Tabora Urban	1,151	0	0	0	0
Total	57,565	1,830	7,171	26,294	4,813

23e OTHER LIVESTOCK/POULTRY POPULATION TREND

	1995	1999	2003
Cattle	1,009,571	1,626,130	1,568,691
Improved Dairy	0	947	1,851
Goats	464,327	930,652	718,996
Sheep	151,034	245,723	235,213
Pigs	4,071	30,406	6,286
Indigenous Chicken	1,670	2,559,020	2,498,191
Layers	6,507	4,950	3,949
Broilers	2,675	20,142	5,330
Total Chicken	1,679,258	2,584,112	2,507,469

FISH FARMING

28.1 FISH FARMING: Number of Agricultural Households involved in Fish Farming and District During 2002/03 Agricultural Year

District	Was Fish Farming Carried Out by this Household During 2002/03				Total
	Yes	%	No	%	
Nzega	0	0	65,566	100	65,566
Igunga	0	0	45,141	100	45,141
Uyui	98	0	41,220	100	41,318
Urambo	0	0	54,120	100	54,120
Sikonge	98	1	19,416	99	19,514
Tabora Urban	26	0	10,232	100	10,258
Total	222	0	235,694	100	235,917

28.2 FISH FARMING: Number of Agricultural Households By System of Farming and District During the 2002/03 Agricultural Year

District	System of Fish Farming	
	Dug out Pond	Total
Uyui	196	196
Sikonge	148	148
Tabora Urban	53	53
Total	396	396

28.3 FISH FARMING: Number of Agricultural Households By Source of Fingerings and District During the 2002/03 Agricultural Year

District	Source of Fingerlings		
	Government Institution	NGOs / Project	Other (Neighbour)
Uyui	0	0	196
Sikonge	99	48	0
Tabora Urban	53	0	0
Total	152	48	196

28.4 FISH FARMING: Number of Agricultural Households By Location of Selling Fish and District During the 2002/03 Agricultural Year

District	Did not Sell	Total
	Number	
Uyui	196	196
Sikonge	148	148
Tabora Urban	53	53
Total	396	396

28.5 FISH FARMING: Total Number of Fish Harvested by Type and District, 2002/03 Agricultural Year

District	Number of Tilapia	Number of Carp	Number of Others
Uyui	3,424	196	196
Sikonge	9,697	0	4,958
Tabora Urban	2,646	55,573	0
Total	15,767	55,768	5,153

LIVESTOCK EXTENSION

29.1a LIVESTOCK EXTENSION: Number of Agricultural Households Receiving Extension Advice By District During 2002/03 Agricultural Year

District	Received Livestock Advice		Did Not Receive Livestock Advice		Total	Total Number of Households Raising Livestock	%
	Number	%	Number	%			
Nzega	5,387	8	60,179	92	65,566	27,645	19
Igunga	4,180	9	40,961	91	45,141	23,588	18
Uyui	1,780	4	39,538	96	41,318	14,758	12
Urambo	2,877	5	51,244	95	54,120	13,740	21
Sikonge	764	4	18,750	96	19,514	5,837	13
Tabora Urban	1,866	18	8,392	82	10,258	2,302	81
Total	16,853	7	219,063	93	235,917	87,871	19

29.1b LIVESTOCK EXTENSION PROVIDERS: Number of Households By Source of Extension and District during the 2002/03 Agriculture Year

District	Source of Advice		
	Government	NGO / Development Project	Large Scale Farmer
Nzega	3,827	421	138
Igunga	2,270	0	0
Uyui	1,261	0	0
Urambo	1,652	0	126
Sikonge	471	96	0
Tabora Urban	1,135	51	0
Total	10,614	567	263

29.1c LIVESTOCK EXTENSION: Number of Households Receiving Advice on Proper Milking By Source and District

District	Source of Advice on Proper Milking			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	447	0	447	27,645	1.6
Igunga	681	0	681	23,588	2.9
Uyui	317	0	317	14,758	2.1
Urambo	0	0	0	13,740	0.0
Sikonge	195	0	195	5,837	3.3
Tabora Urban	263	27	290	2,302	12.6
Total	1,903	27	1,930	87,871	2.2
%	98.6	1.4	100.0		

29.1d LIVESTOCK EXTENSION: Number of Households Receiving Advice on Milk Hygiene By Source and District

District	Source of Advice on Milk Hygiene			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	1,198	0	1,198	27,645	4.3
Igunga	681	0	681	23,588	2.9
Uyui	422	0	422	14,758	2.9
Urambo	104	0	104	13,740	0.8
Sikonge	195	0	195	5,837	3.3
Tabora Urban	448	27	474	2,302	20.6
Total	3,048	27	3,075	87,871	3.5
%	99.1	0.9	100.0		

29.1e LIVESTOCK EXTENSION: Number of Households Receiving Advice on Disease Control By Source and District

District	Source of Advice on Disease Control (Dipping/Spraying)				Total	Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Large Scale Farmer	not applicable			
Nzega	3,841	150	0	0	3,991	27,645	14.4
Igunga	3,623	0	0	0	3,623	23,588	15.4
Uyui	1,472	0	0	0	1,472	14,758	10.0
Urambo	1,566	0	126	0	1,691	13,740	12.3
Sikonge	474	0	0	0	474	5,837	8.1
Tabora Urban	925	27	26	27	1,006	2,302	43.7
Total	11,901	177	152	27	12,257	87,871	13.9
%	97.1	1.4	1.2	0.2	100.0		

29.1f LIVESTOCK EXTENSION: Number of Households Receiving Advice on Herd/Flock Size & Selection By Source and District

District	Source of Advice on Herd/Flock Size & Selection			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	1,457	150	1,607	27,645	5.8
Igunga	2,269	0	2,269	23,588	9.6
Uyui	317	0	317	14,758	2.1
Urambo	126	0	126	13,740	0.9
Sikonge	237	0	237	5,837	4.1
Tabora Urban	608	24	631	2,302	27.4
Total	5,015	174	5,188	87,871	5.9
%	96.7	3.4	100.0		

29.1g LIVESTOCK EXTENSION: Number of Households Receiving Advice on Pasture Establishment By Source and District

District	Source of Advice on Pasture Establishment			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	1,042	124	1,166	27,645	4.2
Igunga	663	0	663	23,588	2.8
Uyui	211	0	211	14,758	1.4
Urambo	0	0	0	13,740	0.0
Sikonge	50	99	149	5,837	2.5
Tabora Urban	131	0	131	2,302	5.7
Total	2,096	223	2,319	87,871	2.6
%	90.4	9.6	100.0		

29.1h LIVESTOCK EXTENSION: Number of Households Receiving Advice on Group Formation and Strengthening By Source and District

District	Source of Advice on Group Formation & Strengthening				Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Co-operative	Total		
Nzega	2,061	721	0	2,783	27,645	10.1
Igunga	2,484	0	566	3,050	23,588	12.9
Uyui	947	0	0	947	14,758	6.4
Urambo	930	0	0	930	13,740	6.8
Sikonge	333	0	0	333	5,837	5.7
Tabora Urban	471	51	0	522	2,302	22.7
Total	7,227	772	566	8,565	87,871	9.7
%	84.4	9.0	6.6	100.0		

29.1i LIVESTOCK EXTENSION: Number of Households Receiving Advice on Calf Rearing By Source and District

District	Source of Advice on Calf Rearing			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	2,608	150	2,759	27,645	10.0
Igunga	2,371	0	2,371	23,588	10.1
Uyui	528	0	528	14,758	3.6
Urambo	125	0	125	13,740	0.9
Sikonge	287	0	287	5,837	4.9
Tabora Urb	334	27	361	2,302	15.7
Total	6,254	177	6,431	87,871	7.3
%	97.2	2.8	100.0		

29.1j LIVESTOCK EXTENSION: Number of Households Receiving Advice on Use of Improved Bulls By Source and District

District	Source of Advice on Improved Bulls			Total Number of Households Raising Livestock	% Receiving Advice out of Total
	Government	NGO / Development Project	Total		
Nzega	721	150	871	27,645	3.2
Igunga	912	0	912	23,588	3.9
Uyui	106	0	106	14,758	0.7
Urambo	0	0	0	13,740	0.0
Sikonge	145	50	195	5,837	3.3
an	209	27	236	2,302	10.2
Total	2,093	227	2,319	87,871	2.6
%	90.2	9.8	100.0		

29.1k LIVESTOCK EXTENSION: Number of Agricultural Households By Quality of Extension Services and District, 2002/03 Agricultural Year

District	Quality of Service										Total
	Very Good		Good		Average		Poor		No Good		
	Number	%	Number	%	Number	%	Number	%	Number	%	
Nzega	1,135	18	3,956	64	566	9	570	9	0	0	6,227
Igunga	1,130	14	2,916	35	797	10	110	1	3,325	40	8,279
Uyui	739	19	936	24	106	3	0	0	2,097	54	3,877
Urambo	1,061	25	1,896	45	242	6	0	0	978	23	4,177
Sikonge	0	0	633	53	464	39	0	0	92	8	1,189
Tabora Urban	116	5	1,339	61	341	15	386	18	25	1	2,207
Total	4,182	16	11,676	45	2,516	10	1,066	4	6,517	25	25,956

29.11 LIVESTOCK EXTENSION: Number of Households Receiving Advice on Other Extension Messages by Source and District

District	Other Livestock Extension						Total	Total Number of Households Raising Livestock	%
	Government	NGO / Development Project	Co-operative	Large Scale Farmer	Other	Total			
Nzega	5,387	5,387	5,387	5,387	5,387	26,933	27,645	97	
Igunga	4,180	4,180	4,180	4,180	4,180	20,899	23,588	89	
Uyui	1,780	1,780	1,780	1,780	1,780	8,901	14,758	60	
Urambo	2,877	2,877	2,877	2,877	2,877	14,383	13,740	105	
Sikonge	764	718	569	569	569	3,189	5,837	55	
Tabora Urban	1,866	1,866	1,866	1,866	1,866	9,332	2,302	405	
Total	16,853	16,807	16,659	16,659	16,659	83,637	87,871	95	
%	20.2	20.1	19.9	19.9	19.9	100.0			

ACCESS TO INFRASTRUCTURE AND OTHER SERVICES

33 01a Mean Distances from Holders Dwellings to Infrastructures and Services by District

District	Mean Distance to											
	Secondary Schools	Primary Schools	All weather roads	Feeder Roads	Hospitals	Health Clinics	District Capital	Regional Capital	Primary Markets	Secondary Market	Tertiary Market	Tarmac Roads
Nzega	19.4	2.7	6.7	3.2	31.4	9.8	41.9	105.8	8.5	15.9	26.6	69.2
Igunga	13.6	2.4	9.1	2.1	25.2	6.4	46.3	163.9	7.0	14.9	27.0	107.1
Uyui	43.7	5.8	11.8	4.5	61.1	18.1	70.5	68.5	13.1	32.4	64.4	68.6
Urambo	22.4	5.7	19.0	3.2	58.4	8.9	63.5	125.8	13.3	19.4	48.3	115.8
Sikonge	67.3	3.5	47.1	2.0	67.0	7.8	76.8	133.4	28.6	25.8	86.0	119.4
Tabora Urban	14.6	4.1	3.8	0.8	13.5	8.2	14.0	14.5	9.4	13.3	13.9	5.0
Total	27.0	4.0	14.1	3.0	43.8	10.1	54.4	113.3	11.8	20.1	42.6	88.4

Regional Capital	113.3
Tarmac Roads	88.4
District Capital	54.4
Hospitals	43.8
Tertiary Market	42.6
Secondary Schools	27.0
Secondary Market	20.1
All weather roads	14.1
Primary Markets	11.8
Health Clinics	10.1
Primary Schools	4.0
Feeder Roads	3.0

33.01b: Mean distances from holders dwellings to Secondary Schools by District for 2002/03 Agriculture Year

District	Distance to Secondary School										Total Number of Households	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	297	0.5	1,216	1.9	11,463	17.5	26,739	40.8	25,850	39.4	65,566	19.4
Igunga	1,097	2.4	2,200	4.9	16,608	36.8	13,312	29.5	11,924	26.4	45,141	13.6
Uyui	2,589	6.3	1,233	3.0	5,154	12.5	5,404	13.1	26,937	65.2	41,318	43.7
Urambo	346	0.6	869	1.6	14,530	26.8	13,718	25.3	24,657	45.6	54,120	22.4
Sikonge	99	0.5	99	0.5	2,201	11.3	3,991	20.5	13,124	67.3	19,514	67.3
Tabora Urban	54	0.5	227	2.2	3,127	30.5	5,054	49.3	1,796	17.5	10,258	14.6
Total	4,482	1.9	5,845	2.5	53,082	22.5	68,218	28.9	104,289	44.2	235,917	27.0

33.01c: Number of Households by Distance to All Weather Road by District for 2002/03 Agriculture Year

District	Distance to ALL Weather Road										Total Number of Households	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	10,622	16.2	17,491	26.7	20,752	31.7	13,415	20.5	3,286	5.0	65,566	6.7
Igunga	12,436	27.5	9,625	21.3	10,961	24.3	4,915	10.9	7,204	16.0	45,141	9.1
Uyui	9,128	22.1	5,959	14.4	13,617	33.0	7,098	17.2	5,515	13.3	41,318	11.8
Urambo	12,171	22.5	8,898	16.4	15,351	28.4	5,021	9.3	12,680	23.4	54,120	19.0
Sikonge	5,194	26.6	1,753	9.0	5,536	28.4	2,346	12.0	4,686	24.0	19,514	47.1
Tabora Urban	4,947	48.2	3,104	30.3	1,819	17.7	361	3.5	26	0.3	10,258	3.8
Total	54,498	23.1	46,830	19.9	68,036	28.8	33,157	14.1	33,397	14.2	235,917	14.1

33.01d: Number of Households by Distance to Feeder Road and District for 2002/03 Agriculture Year

District	Distance to Feeder Road										Total	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	28,747	43.8	23,782	36.3	11,558	17.6	883	1.3	596	0.9	65,566	3.2
Igunga	22,550	50.0	12,717	28.2	8,292	18.4	1,365	3.0	217	0.5	45,141	2.1
Uyui	24,633	59.6	9,627	23.3	5,846	14.1	208	0.5	1,004	2.4	41,318	4.5
Urambo	23,105	42.7	15,973	29.5	10,717	19.8	3,086	5.7	1,239	2.3	54,120	3.2
Sikonge	10,413	53.4	4,242	21.7	4,125	21.1	637	3.3	97	0.5	19,514	2.0
Tabora Urban	6,462	63.0	3,094	30.2	675	6.6	27	0.3	0	0.0	10,258	0.8
Total	115,910	49.1	69,435	29.4	41,213	17.5	6,205	2.6	3,154	1.3	235,917	3.0

33.01e Number of Households by Distance to Hospital by District for 2002/03 Agriculture Year

District	Distance to Hospital										Total Number of Households	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	1,414	2.2	689	1.1	6,271	9.6	17,180	26.2	40,012	61.0	65,566	31.4
Igunga	788	1.7	210	0.5	8,632	19.1	11,104	24.6	24,408	54.1	45,141	25.2
Uyui	712	1.7	0	0.0	0	0.0	2,597	6.3	38,010	92.0	41,318	61.1
Urambo	0	0.0	422	0.8	6,731	12.4	6,137	11.3	40,829	75.4	54,120	58.4
Sikonge	0	0.0	0	0.0	2,003	10.3	4,338	22.2	13,173	67.5	19,514	67.0
Tabora Urban	157	1.5	122	1.2	2,751	26.8	5,305	51.7	1,922	18.7	10,258	13.5
Total	3,071	1.3	1,443	0.6	26,388	11.2	46,661	19.8	158,354	67.1	235,917	43.8

33.01f Number of Households by Distance to Health Clinic by District for 2002/03 Agriculture Year

District	Distance to Health Clinic										Total Number of Households	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	5,039	7.7	15,275	23.3	27,239	41.5	13,233	20.2	4,780	7.3	65,566	9.8
Igunga	4,983	11.0	7,712	17.1	20,363	45.1	11,855	26.3	229	0.5	45,141	6.4
Uyui	2,826	6.8	5,916	14.3	18,084	43.8	8,807	21.3	5,684	13.8	41,318	18.1
Urambo	5,100	9.4	8,378	15.5	26,816	49.5	9,863	18.2	3,963	7.3	54,120	8.9
Sikonge	2,257	11.6	2,304	11.8	8,625	44.2	5,002	25.6	1,326	6.8	19,514	7.8
Tabora Urban	688	6.7	1,838	17.9	6,539	63.7	1,122	10.9	71	0.7	10,258	8.2
Total	20,894	8.9	41,423	17.6	107,666	45.6	49,881	21.1	16,052	6.8	235,917	10.1

33.01g: Number of Households by Distance to Primary School by District for 2002/03 Agriculture Year

District	Distance to Primary School										Total Number of Households	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	8,610	13.1	30,783	46.9	25,136	38.3	1,037	1.6	0	0.0	65,566	2.7
Igunga	7,097	15.7	23,066	51.1	14,641	32.4	221	0.5	116	0.3	45,141	2.4
Uyui	7,023	17.0	14,164	34.3	15,643	37.9	3,162	7.7	1,325	3.2	41,318	5.8
Urambo	10,824	20.0	21,594	39.9	18,316	33.8	2,651	4.9	735	1.4	54,120	5.7
Sikonge	5,911	30.3	6,191	31.7	5,199	26.6	1,792	9.2	420	2.2	19,514	3.5
Tabora Urban	2,532	24.7	4,571	44.6	2,915	28.4	186	1.8	54	0.5	10,258	4.1
Total	41,996	17.8	100,369	42.5	81,851	34.7	9,050	3.8	2,650	1.1	235,917	4.0

33.01h Number of Households by Distance to Regional Capital and District for 2002/03 Agriculture Year

District	Distance to Regional Capital										Total	Mean Distance
	Less than 1 km		1 - 2.9 km		3 - 9.9 km		10 - 19.9 km		Above 20 km			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	150	0.2	150	0.2	296	0.5	268	0.4	64,702	98.7	65,566	105.8
Igunga	114	0.3	0	0.0	338	0.7	0	0.0	44,689	99.0	45,141	163.9
Uyui	600	1.5	0	0.0	0	0.0	203	0.5	40,515	98.1	41,318	68.5
Urambo	757	1.4	0	0.0	126	0.2	623	1.2	52,613	97.2	54,120	125.8
Sikonge	0	0.0	0	0.0	195	1.0	96	0.5	19,224	98.5	19,514	133.4
Tabora Urban	107	1.0	53	0.5	2,766	27.0	5,407	52.7	1,925	18.8	10,258	14.5
Total	1,729	0.7	203	0.1	3,721	1.6	6,595	2.8	223,668	94.8	235,917	113.3

33.01i Number of Households by Distance to Tarmac Road and District for 2002/03 Agriculture Year

District	Distance to Tarmac Road										Total	Mean Distance
	Less than 1		1 - 2.9		3 - 9.9		10 - 19.9		Above 20			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	10,836	16.5	150	0.2	3,869	5.9	2,045	3.1	48,665	74.2	65,566	69.2
Igunga	9,442	20.9	223	0.5	112	0.2	107	0.2	35,257	78.1	45,141	107.1
Uyui	1,008	2.4	0	0.0	308	0.7	97	0.2	39,904	96.6	41,318	68.6
Urambo	10,046	18.6	0	0.0	126	0.2	0	0.0	43,949	81.2	54,120	115.8
Sikonge	2,812	14.4	0	0.0	99	0.5	0	0.0	16,603	85.1	19,514	119.4
Tabora Urb	7,290	71.1	60	0.6	1,309	12.8	1,001	9.8	598	5.8	10,258	5.0
Total	41,434	17.6	433		5,824	2.5	3,250	1.4	184,976	78.4	235,917	88.4

33.01j Number of Households by Distance to Primary Market and District for 2002/03 Agriculture Year

District	Distance to Primary Market										Total	Mean Distance
	Less than 1		1 - 2.9		3 - 9.9		10 - 19.9		Above 20			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	6,595	10.1	9,070	13.8	30,342	46.3	15,123	23.1	4,437	6.8	65,566	8.5
Igunga	5,997	13.3	7,247	16.1	22,044	48.8	8,035	17.8	1,818	4.0	45,141	7.0
Uyui	4,108	9.9	5,465	13.2	15,503	37.5	8,341	20.2	7,901	19.1	41,318	13.1
Urambo	5,628	10.4	5,384	9.9	22,498	41.6	9,163	16.9	11,446	21.1	54,120	13.3
Sikonge	2,588	13.3	1,902	9.7	8,732	44.7	3,561	18.2	2,732	14.0	19,514	28.6
Tabora Urb	1,807	17.6	289	2.8	3,525	34.4	3,522	34.3	1,115	10.9	10,258	9.4
Total	26,723	11.3	29,357	12.4	102,643	43.5	47,745	20.2	29,449	12.5	235,917	11.8

33.01k Number of Households by Distance to Secondary Market and District for 2002/03 Agriculture Year

District	Distance to Secondary Market										Total	Mean Distance
	Less than 1		1 - 2.9		3 - 9.9		10 - 19.9		Above 20			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	715	1.1	4,614	7.0	14,443	22.0	28,418	43.3	17,376	26.5	65,566	15.9
Igunga	2,329	5.2	3,251	7.2	18,272	40.5	7,248	16.1	14,040	31.1	45,141	14.9
Uyui	1,620	3.9	1,014	2.5	5,269	12.8	5,844	14.1	27,571	66.7	41,318	32.4
Urambo	2,468	4.6	4,689	8.7	18,748	34.6	14,118	26.1	14,098	26.0	54,120	19.4
Sikonge	632	3.2	1,227	6.3	6,456	33.1	4,212	21.6	6,987	35.8	19,514	25.8
Tabora Urb	284	2.8	273	2.7	2,989	29.1	4,648	45.3	2,065	20.1	10,258	13.3
Total	8,048	3.4	15,068	6.4	66,176	28.1	64,487	27.3	82,137	34.8	235,917	20.1

33.011 Number of Households by Distance to Tertiary Market and District for 2002/03 Agriculture Year

District	Distance to Tertiary Market										Total	Mean Distance
	Less than 1		1 - 2.9		3 - 9.9		10 - 19.9		Above 20			
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%		
Nzega	1,389	2.1	1,676	2.6	10,153	15.5	13,920	21.2	38,428	58.6	65,566	26.6
Igunga	1,921	4.3	2,349	5.2	8,900	19.7	9,505	21.1	22,467	49.8	45,141	27.0
Uyui	1,112	2.7	202	0.5	1,536	3.7	368	0.9	38,099	92.2	41,318	64.4
Urambo	2,867	5.3	978	1.8	7,368	13.6	6,246	11.5	36,661	67.7	54,120	48.3
Sikonge	828	4.2	294	1.5	3,879	19.9	1,835	9.4	12,678	65.0	19,514	86.0
Tabora Urb	242	2.4	78	0.8	2,807	27.4	5,127	50.0	2,004	19.5	10,258	13.9
Total	8,359	3.5	5,576	2.4	34,643	14.7	37,001	15.7	150,337	63.7	235,917	42.6

33.19a TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Veterinary Clinic and District, 2002/03 Agricultural Year

District	Satisfaction of Using Veterinary Clinic										Total Number of Households
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	689	1.4	7,815	16.2	6,894	14.3	4,277	8.9	28,498	59.2	48,173
Igunga	1,265	1.8	6,963	9.7	6,389	8.9	56,429	78.6	771	1.1	71,817
Uyui	2,074	16.0	4,533	35.0	1,336	10.3	2,585	20.0	2,414	18.7	12,942
Urambo	1,125	10.2	4,099	37.3	1,966	17.9	2,678	24.4	1,112	10.1	10,980
Sikonge	1,299	14.1	2,608	28.2	1,307	14.2	3,208	34.8	809	8.8	9,231
Tabora Urban	365	8.4	2,770	63.4	809	18.5	373	8.5	53	1.2	4,371
Total	6,818	4.3	28,787	18.3	18,702	11.9	69,550	44.2	33,657	21.4	157,514

33.19b TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Extension Center and District, 2002/03 Agricultural Year

District	Satisfaction of Using Extension Center										Total Number of Households
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	689	4.9	5,246	37.0	3,219	22.7	290	2.1	4,718	33.3	14,163
Igunga	919	5.3	4,154	24.1	4,403	25.5	7,548	43.8	217	1.3	17,242
Uyui	1,146	18.9	3,596	59.2	916	15.1	209	3.4	211	3.5	6,078
Urambo	624	11.2	3,357	60.0	875	15.6	425	7.6	315	5.6	5,597
Sikonge	244	6.2	2,082	53.1	960	24.5	591	15.1	43	1.1	3,922
Tabora Urban	73	3.2	1,857	82.8	232	10.4	80	3.6	0	0.0	2,242
Total	3,696	7.5	20,293	41.2	10,605	21.5	9,144	18.6	5,506	11.2	49,243

33.19c TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Research Station and District, 2002/03 Agricultural Year

District	Satisfaction of Using Research Station										Total Number of Households
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	0	0.0	0	0.0	424	7.8	431	7.9	4,566	84.2	5,421
Igunga	0	0.0	0	0.0	108	1.0	10,605	99.0	0	0.0	10,713
Uyui	200	9.7	417	20.2	0	0.0	1,132	54.8	317	15.3	2,066
Urambo	0	0.0	248	25.4	124	12.7	508	52.0	96	9.9	976
Sikonge	97	7.1	142	10.4	50	3.6	940	68.6	142	10.3	1,371
Tabora Urban	106	25.3	132	31.4	102	24.2	54	12.8	27	6.4	421
Total	404	1.9	939	4.5	808	3.9	13,670	65.2	5,148	24.5	20,968

33.19d TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Plant Protection Lab and District, 2002/03 Agricultural Year

District	Satisfaction of Using Plant Protection Lab										Total
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	0	0.0	0	0.0	424	7.8	290	5.4	4,707	86.8	5,421
Igunga	0	0.0	0	0.0	216	2.0	10,487	96.0	224	2.0	10,927
Uyui	204	17.8	106	9.2	0	0.0	413	36.1	422	36.9	1,145
Urambo	0	0.0	0	0.0	96	12.1	412	51.6	289	36.3	797
Sikonge	518	91.3	0	0.0	0	0.0	50	8.7	0	0.0	567
Tabora Urban	53	29.0	26	14.3	50	27.4	54	29.3	0	0.0	183
Total	775	4.1	132	0.7	787	4.1	11,706	61.5	5,642	29.6	19,041

33.19e TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Land Registration Office and District, 2002/03 Agricultural Year

District	Satisfaction of Using Land Registration Office										Total
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	0	0.0	0	0.0	398	5.6	1,642	22.9	5,126	71.5	7,166
Igunga	116	1.1	115	1.1	223	2.1	10,259	94.8	108	1.0	10,820
Uyui	106	6.8	97	6.3	209	13.5	310	20.0	830	53.5	1,552
Urambo	126	6.5	247	12.8	501	26.0	738	38.3	315	16.4	1,927
Sikonge	50	3.1	191	11.8	198	12.3	1,032	64.0	142	8.8	1,612
Tabora Urban	27	9.0	20	6.7	169	57.5	79	26.8	0	0.0	294
Total	424	1.8	669	2.9	1,698	7.3	14,059	60.2	6,521	27.9	23,372

33.19f TYPE OF SERVICE: Number of Agricultural Households by Satisfaction of Using Livestock Development Center

District	Satisfaction of Using Livestock Development Center										Total
	Very Good		Good		Average		Poor		No good		
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	
Nzega	0	0.0	1,444	18.8	1,231	16.1	422	5.5	4,566	59.6	7,663
Igunga	116	1.2	0	0.0	217	2.2	9,607	95.5	114	1.1	10,055
Uyui	208	22.0	106	11.2	0	0.0	209	22.2	422	44.7	945
Sikonge	50	33.8	0	0.0	0	0.0	0	0.0	97	66.2	147
Tabora Urban	0	0.0	13	11.3	78	66.0	27	22.7	0	0.0	118
Total	373	2.0	1,563	8.3	1,526	8.1	10,266	54.2	5,200	27.5	18,928

33.19g TYPE OF SERVICE: Number of Agricultural Households by Level of Satisfaction of the Service and Type of Service, 2002/03 Agricultural Year

Type of Service	Satisfaction of Using Livestock Development Center									
	Very Good		Good		Average		Poor		No good	
	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%	No. of Households	%
Veterinary Clinic	6818	4	28787	18	18702	12	69550	44	33657	21
Extension Centre	3696	8	20293	41	10605	22	9144	19	5506	11
Research Station	404	2	939	5	808	4	13670	65	5148	25
Plant Protection Lab	775	4	132	1	787	4	11706	62	5642	30
Land Registration Office	424	2	669	3	1698	7	14059	60	6521	28
Livestock Development Centre	373	2	1563	8	1526	8	10266	54	5200	28
OVERALL %		3		6		8		47		23

HOUSEHOLD FACILITIES

34.1: Number of Agricultural Households by Type of Toilet and District during the 2002/03 Agriculture Year

District	Type of Toilet					Total
	No Toilet	Flush Toilet	Traditional Pit Latrine	Improved Pit Latrine	Other Type	
Nzega	13,083	446	51,613	424	0	65,566
Igunga	10,807	558	33,323	453	0	45,141
Uyui	5,764	708	34,114	731	0	41,318
Urambo	5,625	253	47,921	204	118	54,120
Sikonge	4,406	247	14,761	99	0	19,514
Tabora Urban	229	144	9,810	75	0	10,258
Total	39,914	2,357	191,542	1,987	118	235,917
%	16.9	1.0	81.2	0.8	0.0	100.0

34.2: Number of households Reporting Average Number of Rooms and Type of Roofing Materials by District, 2002/03 Agricultural Year

District	Number of rooms	Iron Sheets	Tiles	Concrete	Asbestos	Grass/Leaves	Grass & Mud	Other	Total
Nzega	2	7,644	447	0	0	50,779	6,695	0	65,566
Igunga	2	5,935	201	0	445	13,968	24,269	323	45,141
Uyui	3	6,684	300	92	106	33,359	587	190	41,318
Urambo	3	5,875	253	0	0	45,166	2,701	124	54,120
Sikonge	2	4,006	99	46	96	14,622	645	0	19,514
Tabora Urban	3	2,336	39	104	95	7,367	317	0	10,258
Total	2	32,481	1,339	243	741	165,263	35,213	637	235,917
%		13.8	0.6	0.1	0.3	70.1	14.9	0.3	100.0

34.3: Number of Agricultural Households by Type of Owned Assets and District During 2002/03 Agricultural Year

Type of Owned Asset	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urban		Number of Households	%
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%		
Radio	34,533	27	21,466	17	21,841	17	31,874	25	11,363	9	5,645	4.5	126,723	35.8
Landline Phone	0	0	0	0	201	55	0	0	147	40	20	5.4	368	0.1
Mobile Phone	300	13	444	19	1,135	49	0	0	146	6	310	13.3	2,336	0.7
Iron	10,079	24	5,435	13	8,412	20	11,467	27	4,856	12	1,822	4.3	42,071	11.9
Wheelbarrow	2,470	19	4,941	39	2,571	20	568	4	1,425	11	696	5.5	12,671	3.6
Bicycle	47,255	29	32,427	20	27,587	17	38,059	23	12,612	8	6,597	4.0	164,536	46.5
Vehicle	1,045	32	452	14	1,305	41	222	7	98	3	93	2.9	3,214	0.9
Television/Video	574	27	780	37	503	24	0	0	193	9	77	3.6	2,127	0.6
Total Number of Households	96,257	27	65,945	19	63,554	18	82,190	23	30,840	9	15,260	4.3	354,046	100.0

34.4: Number of Agricultural Households by Main Source of Energy Used for Lighting and District During 2002/03 Agriculture Year

Main Source of Energy for Lighting	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urban			
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%
Mains Electricity	147	13.7	648	60.3	205	19.0	0	0.0	0	0.0	75	7.0	1,075	0.5
Solar	150	43.4	0	0.0	98	28.3	0	0.0	98	28.3	0	0.0	346	0.1
Gas (Biogas)	0	0.0	0	0.0	102	67.6	0	0.0	49	32.4	0	0.0	151	0.1
Hurricane Lamp	7,474	31.5	4,126	17.4	3,237	13.6	5,276	22.2	2,257	9.5	1,392	5.9	23,763	10.1
Pressure Lamp	2,368	29.4	1,466	18.2	1,243	15.4	1,223	15.2	1,409	17.5	342	4.3	8,051	3.4
Wick Lamp	54,399	27.6	36,769	18.6	35,935	18.2	46,530	23.6	15,270	7.7	8,308	4.2	197,211	83.6
Candles	438	90.5	0	0.0	0	0.0	0	0.0	0	0.0	46	9.5	484	0.2
Firewood	441	9.4	2,132	45.5	499	10.6	1,091	23.3	430	9.2	94	2.0	4,687	2.0
Other	149	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	149	0.1
Total	65,566	27.8	45,141	19.1	41,318	17.5	54,120	22.9	19,514	8.3	10,258	4.3	235,917	100.0

34.5: Number of Agricultural Households by Main Source of Energy for Cooking and District During 2002/03 Agriculture Year

District	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urb			
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%
Mains Electricity	148	59.2	0	0.0	102	40.8	0	0.0	0	0.0	0	0.0	250	0.1
Solar	0	0.0	0	0.0	103	67.6	0	0.0	49	32.4	0	0.0	152	0.1
Bottled Gas	149	26.4	0	0.0	211	37.6	126	22.5	49	8.7	27	4.8	562	0.2
Parraffin / Kerocine	2,553	91.0	107	3.8	98	3.5	0	0.0	49	1.7	0	0.0	2,807	1.2
Charcoal	1,655	26.3	1,296	20.6	1,186	18.8	1,219	19.4	685	10.9	258	4.1	6,299	2.7
Firewood	60,187	26.9	43,391	19.4	39,303	17.6	52,418	23.4	18,487	8.3	9,947	4.4	223,732	94.8
Crop Residues	574	31.7	347	19.1	315	17.3	357	19.7	195	10.7	27	1.5	1,814	0.8
Livestock Dung	300	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	300	0.1
Total	65,566	27.8	45,141	19.1	41,318	17.5	54,120	22.9	19,514	8.3	10,258	4.3	235,917	100.0

34.6: Number of Agricultural Households by Main Source of Drinking Water by Season (wet and dry) and District During 2002/03 Agriculture Year

District	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Piped Water	Wet	1,489	224	1,932	742	144	602
	Dry	1,489	0	1,228	867	0	609
Protected Well	Wet	5,422	2,240	3,501	4,419	1,388	2,460
	Dry	5,332	1,677	3,489	4,062	1,340	2,462
Protected / Covered Spring	Wet	989	457	92	370	335	255
	Dry	1,135	564	0	617	335	328
Unprotected Well	Wet	41,951	15,651	34,815	45,514	14,834	6,477
	Dry	42,294	15,909	35,052	45,998	15,175	6,382
Unprotected Spring	Wet	6,175	1,813	102	1,677	2,423	265
	Dry	11,940	5,202	206	1,706	2,571	292
Surface Water (Lake / Dam / River / Stream)	Wet	1,886	9,542	668	613	142	79
	Dry	2,174	16,038	1,241	623	92	159
Covered Rainwater Catchment	Wet	409	0	106	235	0	27
	Dry	150	0	0	0	0	0
Uncovered Rainwater Catchment	Wet	6,342	11,881	102	549	50	93
	Dry	0	4,017	102	248	0	26
Other	Wet	901	3,333	0	0	198	0
	Dry	1,051	1,734	0	0	0	0
Total Agricultural Households per District		65,566	45,141	41,318	54,120	19,514	10,258

34.7: Proportion of Agricultural Households by Main Source of Drinking Water by Season (Wet and Dry) and District During 2002/03 Agriculture Year

Source	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Piped Water	Wet	2	0	5	1	1	6
	Dry	2	0	3	2	0	6
Protected Well	Wet	8	5	8	8	7	24
	Dry	8	4	8	8	7	24
Protected / Covered Spring	Wet	2	1	0	1	2	2
	Dry	2	1	0	1	2	3
Unprotected Well	Wet	64	35	84	84	76	63
	Dry	65	35	85	85	78	62
Unprotected Spring	Wet	9	4	0	3	12	3
	Dry	18	12	0	3	13	3
Surface Water (Lake / Dam / River / Stream)	Wet	3	21	2	1	1	1
	Dry	3	36	3	1	0	2
Covered Rainwater Catchment	Wet	1	0	0	0	0	0
	Dry	0	0	0	0	0	0
Uncovered Rainwater Catchment	Wet	10	26	0	1	0	1
	Dry	0	9	0	0	0	0
Other	Wet	1	7	0	0	1	0
	Dry	2	4	0	0	0	0

34.8: Number of Agricultural Households Reporting Distance to Main Source of Drinking Water during Wet Season by District, 2002/03 Agriculture Year

Distance to Main Source of Drinking Water	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Less than 100m	Wet	5,690	3,253	4,659	15,745	2,690	1,698
	Dry	3,957	1,231	3,440	11,882	1,809	1,616
100 - 299 m	Wet	10,551	4,716	10,067	9,635	2,811	1,335
	Dry	6,184	3,005	8,018	7,223	2,415	1,203
300 - 499 m	Wet	3,516	2,822	2,955	2,679	1,744	207
	Dry	2,642	1,961	3,047	2,651	1,746	206
500 - 999 m	Wet	18,155	7,637	8,720	9,823	5,771	2,942
	Dry	11,117	2,969	6,922	8,632	5,232	2,765
1 - 1.99 Km	Wet	20,922	16,694	10,372	11,084	4,184	2,677
	Dry	23,335	9,913	10,743	15,224	4,625	2,747
2 - 2.99 Km	Wet	5,118	5,749	3,180	3,446	1,924	1,150
	Dry	10,641	7,540	3,806	5,294	2,709	1,097
3 - 4.99 Km	Wet	1,014	2,926	943	1,353	241	212
	Dry	4,182	9,924	4,244	2,244	832	453
5 - 9.99 Km	Wet	599	1,345	422	355	99	37
	Dry	2,922	6,090	1,098	970	97	171
10Km and above	Wet	0	0	0	0	49	0
	Dry	587	2,507	0	0	49	0

34.9: Proportion of Agricultural Households Reporting Distance to Main Source of Drinking Water by Season (Wet and Dry) and District During 2002/03 Agriculture Year

Source	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Less than 100m	Wet	9	7	11	29	14	17
	Dry	6	3	8	22	9	16
100 - 299 m	Wet	16	10	24	18	14	13
	Dry	9	7	19	13	12	12
300 - 499 m	Wet	5	6	7	5	9	2
	Dry	4	4	7	5	9	2
500 - 999 m	Wet	28	17	21	18	30	29
	Dry	17	7	17	16	27	27
1 - 1.99 Km	Wet	32	37	25	20	21	26
	Dry	36	22	26	28	24	27
2 - 2.99 Km	Wet	8	13	8	6	10	11
	Dry	16	17	9	10	14	11
3 - 4.99 Km	Wet	2	6	2	3	1	2
	Dry	6	22	10	4	4	4
5 - 9.99 Km	Wet	1	3	1	1	1	0
	Dry	4	13	3	2	0	2
10Km and above	Wet	0	0	0	0	0	0
	Dry	1	6	0	0	0	0

34.10: Number of Agricultural Households by Time Spent to and from Main Source of Drinking Water by Season (Wet and Dry) and District During 2002/03 Agriculture Year

District	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Less than 10	Wet	2,814	447	1,026	6,457	446	304
	Dry	1,939	116	1,012	4,390	198	271
10 - 19 Minutes	Wet	15,112	4,483	9,898	16,552	4,468	3,061
	Dry	8,706	1,020	7,744	13,906	3,772	2,741
20 - 29 Minutes	Wet	13,653	3,391	5,222	6,413	2,749	1,132
	Dry	8,891	1,004	4,726	5,678	2,701	1,157
30 - 39 Minutes	Wet	17,693	11,726	10,768	11,221	5,733	3,085
	Dry	13,704	4,688	10,268	9,877	4,949	3,027
40 - 49 Minutes	Wet	5,818	5,627	3,329	1,084	634	517
	Dry	6,651	3,286	2,363	1,443	779	568
50 - 59 Minutes	Wet	3,822	2,219	3,255	6,723	1,597	545
	Dry	2,922	1,211	2,867	6,271	1,105	443
above one Hour	Wet	6,654	17,248	7,819	5,670	3,887	1,614
	Dry	22,752	33,816	12,336	12,555	6,009	2,052

34.11: Proportion of Agricultural Households Reporting Time Spent to and from Main Source of Drinking Water by Season (Wet and Dry) and District During 2002/03 Agriculture Year

District	Season	District					
		Nzega	Igunga	Uyui	Urambo	Sikonge	Tabora Urban
Less than 10	Wet	4	1	2	12	2	3
	Dry	3	0	2	8	1	3
10 - 19 Minutes	Wet	23	10	24	31	23	30
	Dry	13	2	19	26	19	27
20 - 29 Minutes	Wet	21	8	13	12	14	11
	Dry	14	2	11	10	14	11
30 - 39 Minutes	Wet	27	26	26	21	29	30
	Dry	21	10	25	18	25	30
40 - 49 Minutes	Wet	9	12	8	2	3	5
	Dry	10	7	6	3	4	6
50 - 59 Minutes	Wet	6	5	8	12	8	5
	Dry	4	3	7	12	6	4
above one Hour	Wet	10	38	19	10	20	16
	Dry	35	75	30	23	31	20

34.12: Number of Agricultural Households by Number of Meals the Household Normally Took by District

Number of Meals per Day	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urban		Number of Households	%
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%		
One	1,190	16	2,202	29	1,934	26	733	10	914	12	519	7	7,492	3.2
Two	19,042	21	8,983	10	14,990	17	32,149	36	8,737	10	5,151	6	89,052	37.7
Three	44,886	33	33,151	24	23,789	17	21,130	15	9,669	7	4,589	3	137,213	58.2
Four	447	21	804	37	605	28	109	5	194	9	0	0	2,159	0.9
Total	65,566	28	45,141	19	41,318	18	54,120	23	19,514	8	10,258	4	235,917	100.0

34-13: HOUSEHOLD FACILITIES: Number of Agricultural Households Reporting Number of days the household Consumed Meat during the Preceding Week by District

Number of Days	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urban		Number of Households	%
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%		
Not Eaten	19,244	24	16,501	21	16,334	20	17,902	22	6,179	8	3,570	4	79,730	33.8
One	29,694	38	13,859	18	10,558	14	15,015	19	4,649	6	3,777	5	77,552	32.9
Two	11,603	24	8,669	18	8,546	17	13,197	27	4,870	10	1,952	4	48,837	20.7
Three	2,921	17	2,824	16	3,154	18	5,920	34	2,053	12	632	4	17,504	7.4
Four	1,538	21	1,825	25	1,725	23	1,349	18	771	10	204	3	7,411	3.1
Five	290	10	778	27	693	24	361	13	658	23	96	3	2,876	1.2
Six	0	0	579	70	0	0	125	15	95	12	26	3	825	0.3
Seven	277	23	107	9	308	26	251	21	240	20	0	0	1,182	0.5
Total	65,566	28	45,141	19	41,318	18	54,120	23	19,514	8	10,258	4	235,917	100.0

34.14: Number of Households by Number of Days the Household Consumed Fish during the Preceding Week by District

Number of Days	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urb		Number of Households	%
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%		
Not Eaten	37,526	32	31,863	27	17,811	15	20,445	17	8,961	8	2,116	2	118,722	50.3
One	23,718	43	6,506	12	7,331	13	11,844	22	2,769	5	2,712	5	54,881	23.3
Two	2,182	8	4,320	15	8,515	29	8,381	29	3,043	10	2,584	9	29,025	12.3
Three	696	4	1,774	11	4,455	28	5,680	35	2,088	13	1,448	9	16,141	6.8
Four	1,298	13	678	7	1,649	17	3,881	39	1,525	15	834	8	9,865	4.2
Five	146	3	0	0	1,029	21	2,697	54	786	16	353	7	5,011	2.1
Six	0	0	0	0	211	26	379	46	98	12	133	16	822	0.3
Seven	0	0	0	0	315	22	813	56	244	17	77	5	1,450	0.6
Total	65,566	28	45,141	19	41,318	18	54,120	23	19,514	8	10,258	4	235,917	100.0

34.15: Number of Households Reporting the status of Food ASatisfaction of the Household during the Preceding Year by District

Status of Food Satisfaction	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urb		Number of Households	%
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%		
Never	29,554	28	16,357	15	19,873	19	27,117	26	10,285	10	2,473	2	105,659	44.8
Seldom	22,394	29	17,097	22	11,882	16	16,042	21	4,819	6	4,212	6	76,446	32.4
Sometimes	4,879	29	3,466	20	2,143	13	4,221	25	1,411	8	834	5	16,953	7.2
Often	4,761	23	3,742	18	4,970	24	3,799	18	1,748	8	1,591	8	20,610	8.7
Always	3,978	24	4,480	28	2,450	15	2,942	18	1,251	8	1,148	7	16,249	6.9
Total	65,566		45,141		41,318		54,120		19,514		10,258		235,917	100.0

34.16: Number of Households by Main Source of Income and District During 2002/03 Agriculture Year

Main Source of Cash Income	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urban			
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%
Sales of Food Crops	17,562	33	6,988	13	8,802	16	14,250	27	4,926	9	1,225	2	53,753	22.8
Sale of Livestock	9,875	41	8,774	36	2,725	11	1,316	5	1,155	5	383	2	24,229	10.3
Sale of Livestock Products	300	12	223	9	414	17	718	29	390	16	444	18	2,489	1.1
Sales of Cash Crops	985	3	8,719	23	7,402	20	16,197	43	4,013	11	412	1	37,727	16.0
Sale of Forest Products	7,218	41	1,551	9	3,147	18	1,328	7	2,884	16	1,658	9	17,786	7.5
Business Income	5,611	20	3,765	13	6,044	22	8,801	31	1,507	5	2,223	8	27,950	11.8
Wages & Salaries in Cash	1,705	32	998	19	727	14	794	15	489	9	576	11	5,288	2.2
Other Casual Cash Earnings	14,834	30	12,347	25	8,586	17	8,037	16	3,239	7	2,265	5	49,309	20.9
Cash Remittance	5,555	39	1,433	10	3,158	22	2,332	16	770	5	930	7	14,177	6.0
Fishing	296	57	0	0	0	0	107	21	92	18	26	5	522	0.2
Other not applicable	1,175	53	343	15	313	14	239	11	49	2	117	5	2,236	0.9
Total	65,566	28	45,141	19	41,318	18	54,120	23	19,514	8	10,258	4	235,917	100.0

34.17: Number of Households by Type of Roofing Materials and District During 2002/03 Agriculture Year

Roofing Materials	District												Total	
	Nzega		Igunga		Uyui		Urambo		Sikonge		Tabora Urb			
	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%	Number of Households	%
Iron Sheets	7,644	24	5,935	18	6,684	21	5,875	18	4,006	12	2,336	7	32,481	13.8
Tiles	447	33	201	15	300	22	253	19	99	7	39	3	1,339	0.6
Concrete	0	0	0	0	92	38	0	0	46	19	104	43	243	0.1
Asbestos	0	0	445	60	106	14	0	0	96	13	95	13	741	0.3
Grass / Leaves	50,779	31	13,968	8	33,359	20	45,166	27	14,622	9	7,367	4	165,263	70.1
Grass & Mud	6,695	19	24,269	69	587	2	2,701	8	645	2	317	1	35,213	14.9
Other	0	0	323	51	190	30	124	19	0	0	0	0	637	0.3
Total Number of Households	65,566	28	45,141	19	41,318	18	54,120	23	19,514	8	10,258	4	235,917	100.0

APPENDIX III QUESTIONNAIRES

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Page Number

Agriculture Sample Census 2002/03



ACLF 1: Sub-village leader listing form

Region _____ Code <input style="width:40px;" type="text"/>	Ward _____ Code <input style="width:40px;" type="text"/>
District _____ Code <input style="width:40px;" type="text"/>	Village _____ Code <input style="width:40px;" type="text"/>

Name of Village Chairman:.....

Sub-village leader number	Name of sub-village leader	Number of households		Comments
		From office register	After enumeration	
(1)	(2)	(3)	(4)	(5)
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
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<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
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<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
<input style="width:30px;" type="text"/>		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	
Total		<input style="width:40px;" type="text"/>	<input style="width:40px;" type="text"/>	

Name of enumerator..... Signature Date.....

Name of supervisor..... Signature Date.....

UNITED REPUBLIC OF TANZANIA



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Interval
Starting point

Page Number.....

Agriculture Sample Census 2002/03

ACL: 2 Household listing form - form for listing household heads and their agriculture activities

Region	_____	Code	<input type="text"/> <input type="text"/>	Name of Sub-village Leader	_____
District	_____	Code	<input type="text"/> <input type="text"/>	Subvillage leader code	<input type="text"/> <input type="text"/>
Ward	_____	Code	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Name of Sub-village	_____
Village	_____	Code	<input type="text"/> <input type="text"/>		



(1)	(2)	(3)	Number of									(13)	(14)
			Cattle				Goats	Sheep	Pigs	poultry/ducks	Rabbit		
			Total Number	Adult male cattle	Adult female cattle	Calves							
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>													
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>													
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>													
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<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>													
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>													
Totals													

* NOTE: (Column 13) Place a "✓" if the household has at least 1 field over 25m² and/or keeps at least 1 Cow, 5 Goats/Sheep/Pigs or 50 Chicken/poultry or ducks

†(Column 3) A field must be at least 25 m²

Name of enumerator..... Signature Date.....
Name of supervisor..... Signature Date.....

UNITED REPUBLIC OF TANZANIA



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National Agriculture Sample Census 2002/03

ACLF: 3 Household listing of 15 selected farmers

Region _____
 District _____
 Ward _____
 Village _____

Code
 Code
 Code
 Code






S/N	Sub village leader number		Name of sub-village leader	Agriculture hh serial number	Name of selected head of household	Number of							
	(1)	(2)				(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
01				<input type="text"/> <input type="text"/> <input type="text"/>									
02				<input type="text"/> <input type="text"/> <input type="text"/>									
03				<input type="text"/> <input type="text"/> <input type="text"/>									
04				<input type="text"/> <input type="text"/> <input type="text"/>									
05				<input type="text"/> <input type="text"/> <input type="text"/>									
06				<input type="text"/> <input type="text"/> <input type="text"/>									
07				<input type="text"/> <input type="text"/> <input type="text"/>									
08				<input type="text"/> <input type="text"/> <input type="text"/>									
09				<input type="text"/> <input type="text"/> <input type="text"/>									
10				<input type="text"/> <input type="text"/> <input type="text"/>									
11				<input type="text"/> <input type="text"/> <input type="text"/>									
12				<input type="text"/> <input type="text"/> <input type="text"/>									
13				<input type="text"/> <input type="text"/> <input type="text"/>									
14				<input type="text"/> <input type="text"/> <input type="text"/>									
15				<input type="text"/> <input type="text"/> <input type="text"/>									

Name of Enumerator: _____ Signature _____ Date _____

Name of Supervisor _____ Signature _____ Date _____

Ministry of Agriculture and Food Security, Ministry of Water and Livestock Development, Ministry of
 Cooperatives and Marketing and the National Bureau of Statistics

United Republic of Tanzania	
ACQ 1	
CONFIDENTIAL	
Small holder/Small Scale Farmer Questionnaire	
Agriculture Sample Census	
2002/2003	
	

Enumerator	Name	Signature													
	<input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">Hour</td> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">Minutes</td> </tr> <tr> <td style="text-align: right;">Start time</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> <tr> <td style="text-align: right;">End time</td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> <td style="text-align: center;"><input type="text"/></td> </tr> </table>		Hour		Minutes	Start time	<input type="text"/>	<input type="text"/>	<input type="text"/>	End time	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Hour		Minutes												
Start time	<input type="text"/>	<input type="text"/>	<input type="text"/>												
End time	<input type="text"/>	<input type="text"/>	<input type="text"/>												
Field level checking by:			<i>To be completed by the supervisor ONLY after field/farm level checking of the enumeration process. This should be countersigned by the enumerator.</i>												
District Supervisor:	Name	signature		Date .. / .. / ..											
Regional Supervisor:	Name	signature		Date .. / .. / ..											
National Supervisor:	Name	signature		Date .. / .. / ..											
District checking in Office:			<i>All questionnaires must be checked at the district office.</i>												
District Supervisor	Name	signature		Date .. / .. / ..											
For Use at National Level only:			<i>See back page for details of query</i>												
Data Entered by	Name	signature		Date .. / .. / ..											
Queried	Name	signature		Date .. / .. / ..											

1.0 IDENTIFICATION DETAILS			
1.1 Location			
S/N	Location Name	Codes	
1.1.1	Region	<input type="text"/> <input type="text"/>	
1.1.2	District	<input type="text"/>	
1.1.3	Ward	<input type="text"/> <input type="text"/> <input type="text"/>	
1.1.4	Village	<input type="text"/> <input type="text"/>	
1.2 Details of the respondent and household head			
S/N		Codes	
1.2.1	Name & number of local leader	<input type="text"/> <input type="text"/> <input type="text"/>	
1.2.2	Name & number of household head	<input type="text"/> <input type="text"/>	
1.2.3	Sex of household head (Male = 1, Female = 2)	<input type="text"/> <input type="text"/>	
1.2.4	Name of respondent	/	
1.2.5	Relationship of Respondent to Household Head		
<p>Relationship to household head codes (Q 1.2.5) Head of Household.....1 Son/Daughter3 Grandson/Granddaughter5 Other (friend, employee, etc)...8 Spouse2 Father/Mother4 Other relative.....6</p>			
2.0 ACTIVITIES OF THE HOUSEHOLD			
2.1	Type of Agriculture Household	<input type="text"/>	
<p>Agriculture household codes(Q2.1) Crops only.....1 Livestock only2 Pastoralist.....3 Crops and Livestock4</p>			
2.2	Rank the following livelihood activities/source of income of the household in order of importance		
S/N	Livelihood/source of income activity.	Rank in order of importance 1=most 7=least	How important are each of these activities expressed in percentage.
	(1)	(2)	(3)
2.2.1	Annual Crop farming	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.2	Permanent crop farming	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.3	Livestock keeping/herding	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.4	Off Farm Income	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.5	Remittances	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.6	Fishing/hunting and gathering	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
2.2.7	Tree/forest resources (eg honey, firewood, timber,etc)	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> %
			<input type="text"/> <input type="text"/> <input type="text"/> %

Definition and working page for page 1**General Definitions****Small holder hh/small scale farm:**

Should have between 25sq metres and 20 Hectares under production, and/or between 1 and 50 head of Cattle, and/or between 5 and 100 head of Sheep/Goats/Pigs, and/or between 50 and 1000 chickens/turkeys/ducks/rabbits.

Household: A group of people who occupy the whole or part of one or more housing units and makes joint provisions for food and/or other essentials for living.

Household Head: A person who is acknowledged by all other members of the household either by virtue of his age or standing in the household as the head. He/she should be a permanent resident of the house and he/she is the main person responsible for making decisions.

Agricultural Holding: This is an economic unit of agricultural production under single management. It consists of all livestock kept and all land used for agricultural production without regard to title. For the purpose of this survey, the agricultural holdings are restricted to those which meet one of the following conditions:

- Having or operated at least 25 sq meter of arable land
- Own or keep at least one head of cattle or five goats/sheep/pigs or fifty chicken/ducks/turkeys during the agricultural year 2002/03 (October 2002 to September 2003) .

Question Specific Definitions:**Type of Agriculture Holdings Codes (Q2.1):**

- **Crops only:** A holding is referred to be a crops only holding if it has cultivated a piece of land equal or exceeding 25 sq Meter. This also applies to all households owning or have kept livestock whose number does not qualify such household to be an agricultural holding (No cattle, less than 5 goats/sheep/pigs, less than 50 chickens/turkeys/ducks/rabbits)

- **Livestock only:** A holding is referred to be a Livestock only holding if it has exercised Livestock husbandry only during the agricultural year. The livestock can be herded in search for areas of pasture, but the core household unit always remains in the same place and the herder is rarely away from this place for long periods at a time.

- **Livestock pastoralism:** This refers to a household which practices livestock production as its major income generating activity and a means of subsistence, but moves from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they have no permanent place of residence.

For both livestock only and pastoralism , the number of livestock has to be at least 1 head of cattle, 5 goats/sheep/pigs or 50 chickens/turkeys/ ducks/rabbits. This also applies to all households owning or have cultivated a piece of land less than 25 sq meter, which does not qualify such household be an agricultural holding.

- **Both crops and livestock:** A holding is referred to be a both crops and livestock if it has cultivated a piece of land equal or exceeding 25 sq meter and if such households is owning or have kept livestock whose number qualify such household be an agricultural holding.

Important livelihood activities/source of income (Q 2.2):

- **Crop farming:** This refers to a household where crop production is its major means of subsistence and income generation.

- **Livestock farming/herding/pastoralism:** This refers to a household where livestock farming/herding is its major means of subsistence & income generation.

- **Off Farm Income** This refers to cash generated from activities other than from the households holding. This can be from permanent employment (eg government/other), temporary employment/labouring and includes cash generated from working on other farmers farms.

-**Remittances:** Assistance from family members who are not currently part of the household, or from a relative or family friend. This assistance is usually in the form of cash but it can also be in-kind (eg food, clothes, building material, farm tools, etc). The money is a gift and is not paid back.

-**Fishing/hunting and gathering** The use of non farmed resources for food eg fishing, hunting wildlife and gathering mushrooms, berries, wild honey roots from uncultivated land.

Procedures for Questions:**Q 2.1 Type of agriculture household/holding**

1. Using the options under the question classify the type of agriculture hh/holding

Note: If the hh had 1 acre of crops and raised 40 chickens during 2002/03 it is classified as '**Crops only**' as the number of chickens do not qualify the hh as keeping livestock.

Q 2.2 Important hh livelihood activities /source of income

1. Read the list in column 1 to the respondent and ask him to rank them in order of importance during the reference year.

2. In column 2 Indicate the importance of each activity by placing '1' against the most important, '2' against the second most important, etc until you reach '7' the least important activity/source of income.

Note: You must attempt to fill in all boxes. Most households will carry out these activities to a greater or lesser degree. You will normally have to probe to get remittances.

If the hh did not undertake an activity during the 2002/2003 agriculture year then mark the appropriate box in column 2 with an 'X'.

3. For each activity/source of income assign a percentage. The enumerator should assist the respondent in assigning the percentage based on the information provided by the farmer.

4. After completing column 3 make sure the percentages add up to 100.

Note: It is not essential to be 100% accurate. This question is just to give the relative importance of the different items in general terms

3.0 HOUSEHOLD INFORMATION

3.1 Give details of personal **particulars** of all household members beginning with the head of the household

S/N	Names of household members	Relation-ship to head	Sex M=1 F=2	Age (if age is above 99 years then write 99)	Survival of Parents		Read & Write	Edu- ca- tion Status	Education Level reached	Invol- vement in farming	Main activity (for aged 5 & above)	Off-farm Income Yes=1 No=2
					Mo- ther	Fa- ther						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
3.1.1	1	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>
3.1.16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>

Relation to head (Col 2)

Head of household1
Spouse2
Son/daughter3
Father/Mother4
Grandson/granddaughter .5
Other Relative6
Others8

Survival of Parents (Col 5 & 6)

Yes1
No2
Don't know3

Read & Write (Col 7)

Swahili1
English2
Swahili & English3
Any other language4
Don't Read/ Write5

Education Status (Col 8)

Attending School1
Completed2
Never attended School3

Education Level Reached (Col 9)

Primary Education

Not of school ageNA
Under Standard One 00
Standard One01
Standard Two02
Standard Three03
Standard Four04
Standard Five05
Standard Six06
Standard Seven07
Standard Eight08
Training after Primary
Education09
Pre Form One10

Secondary Education

Form one11
Form two12
Form three13
Form four14
Form five15
Form six16
Training after Secondary
Education17
University & other tertiary
Education18
Adult Education19
Not applicable99

Involvement in farming activities (Col 10)

Works full time on farm ...1
Works part-time on farm 2
Rarely works on farm3
Never works on farm.....4

Main activity (Col 11)

Crop Farming01
Livestock Keeping/Herding..02
Livestock Pastoralism.....03
Fishing04
Paid employment:
- Government/parastatal05
- Private- NGO/mission/etc .06
Self employed (non farming)
- with employees07
- without employees08
Unpaid family helper (non
agriculture)09
Not working & available.....10
Not working & unavailable...11
Housemaker/housewife12
Student13
Unable to work /too old/
Retired/sick/disabled).....14
Other98

Definition and working page for page 2**Question Specific Definitions:****Relation to head (Col 2):**

- **Household Head:** A person who is acknowledged by all other members of the household either by virtue of their age or standing as the household head.

Read and Write (Col 7):

- **Any other language:** Must be a written language.

For someone who can read and write in Swahili and any other language apart from English, the correct code is 1. For one who can read and write in English and any other language apart from Swahili the correct code is 2. Code 4 should only be used for another language but not English or Swahili

Education Level Reached (Col 9):

Indicate the highest level only. For those still attending school fill in the last year reached before the survey period. For example if a hh member is currently in standard 7 this year his highest grade reached is standard 6

Main Activity (Col 11):

- **Crop farming:** The persons main activity is crop production. This can be annual crops, vegetables, permanent crops or tree farming.

- **Livestock farming/herding:** The persons main activity is livestock farming/herding. The livestock can be herded in search for areas of pasture, but the core household unit always remains in the same place and the herder is rarely away from this place for long periods at a time. This category also includes fish farming but not fishing.

- **Livestock pastoralism:** The persons main activity is in moving livestock from one place to another searching for water and pasture for the livestock. This movement usually involves long distances and in many cases the whole household unit moves with the livestock and they may have no permanent place of residence.

- **Paid employment** - In full time employment earning a cash income

- Government/Parastatal - In full time employment for a government Ministry, Department or Board that is controlled by the Government
- Private/NGO/Mission/etc - employed by Non public/government organisation

- **Self employee** - works for own business for cash income

- With employees - Works for own business for cash and employs other workers

- Without employees - Works for own business for cash but does not employ other workers

- **Not working but available to work** - No productive activity but would like to have one.

- **Not working & nor available for work** - No productive activity and does not want to have one.

- **Unable to work** too old, too young, retired, disabled, etc

Off-farm Income (Col 12) - Income made from activities NOT on the HH's farming activities. This can be any off farm income generation activity and includes working for cash on other peoples farms.

Indicate whether each member was involved in an off farm income generating activity during 2002/03

Overview to section 3.0**Section 3.0 - Preliminary note**

1. Make sure that you define the hh properly to ensure that all the members of the hh are included. Make sure you stress that the hh is not just the hh heads direct family and that it includes other people living and eating together with the family.

2. If you notice that his house is large or you see many people around his house and he has only given you small number of hh members enquire further until you are sure that you have captured all the hh members.

Procedures for questions**Section 3.0 - Household Information**

1. For each household member complete columns 1, 2 & 3.

2. After completing columns 1, 2 & 3 for each household member go back to the first household member and complete the remaining columns for that member.

3. Repeat step 2 for the rest of the household members

IMPORTANT NOTE:

Cross check responses in columns 11 and 12 with section 2 especially in relation to:

off-farm income - if a hh member was involved in off farm income then there should be a response in question 2.2.4 and vice versa.

4.0 LAND ACCESS/OWNERSHIP/TENURE			
4.1 Details of area "owned" by the household in the 2002/03 agricultural year. Give area reported by the respondent in "acres".		Area in Acres	
4.1.1	Area Leased/Certificate of ownership	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	4.2 Was all land available to the hh used during 2002/03 (Yes=1, No=2) <input type="checkbox"/>
4.1.2	Area owned under Customary Law	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
4.1.3	Area Bought from others	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	4.3 Do you consider that you have sufficient land for the hh (Yes=1, No=2) <input type="checkbox"/>
4.1.4	Area Rented from others	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
4.1.5	Area Borrowed from others	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	4.4 Do any female members of the hh own or have customary right to land (Yes=1, No=2) <input type="checkbox"/>
4.1.6	Area Share -cropped from others	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
4.1.7	Area under Other forms of tenure	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
Total area		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	

5.0 LAND USE			
5.1 Area operated by household under different forms of land use during 2002/03 agriculture year. Give area reported by the respondent in "acres".		Area in Acres	
			Calculation area
5.1.1	Area under Temporary Mono-crops	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.2	Area under Temporary Mixed crops (eg Maize & beans)	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.3	Area under Permanent Mono-crops	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.4	Area under Permanent Mixed crops (eg bananas, coffee & trees)	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.5	Area under Permanent/temporary mix (eg bananas & maize)	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.6	Area under Pasture	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.7	Area under Fallow	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.8	Area under Natural Bush	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.9	Area under Planted Trees	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.10	Area Rented to others	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.11	Area Unusable	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
5.1.12	Area of Uncultivated Usable land (excluding fallow)	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	
Total area		<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	

6.0 ACCESS AND USE OF RESOURCES

6.1 In the following table indicate the distance to the different fields used by the household

S/N	Field Number	Distance (in kilometres) from field to:			Distance codes less than 100m1 between 2 and 3km6 between 100 and 300m ..2 between 3 and 5km7 between 300 and 500m ..3 between 5 and 10 km ..8 between 500 and 1km....4 Over 10 km9 between 1 and 2km5
		Homestead	Nearest road	Nearest Market	
6.1.1	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6.1.2	2	<input type="text"/>	<input type="text"/>	<input type="text"/>	
6.1.3	3	<input type="text"/>	<input type="text"/>	<input type="text"/>	

6.2 In the following table indicate the distance and use of the following communal resources

S/N	Communal Resource	Distance to resource (km)		Main hh use	Instructions for distance to resource (Col 2 and 3): If under 1km, write 0 If above 1km round to whole numbers eg 1.5km= 2km, 1.25km= 1km
		dry season	wet season		
	(1)	(2)	(3)	(4)	
6.2.1	Water for humans	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	Main hh use (Col 4) Home or farm Consumption/utilisation.....1 Sold to Neighbours.....2 Sold to trader on the farm.....3 Sold to village market4 Sold to local wholesale market.....5 Sold to major wholesale market6 Not used by household.....7 Not available8
6.2.2	Water for livestock	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.3	Communal Grazing	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.4	Communal Firewood	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.5	Wood for Charcoal	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.6	Building poles	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.7	Forest for bees (honey)	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.8	Hunting (animal products)	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	
6.2.9	Fishing (Fish)	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	

Definition and working page for page 3

Question Specific Definitions

Section 4.1 - Land Access/Ownership

Lease/Certificate of Ownership Area under lease/certificate of ownership refers to the area for which the household possesses a government issued leasehold title or certificate of ownership. The land will normally be officially surveyed and boundaries marked. This includes leased land bought from others where the lease/certificate of ownership has been transferred.

Customary Law: This refers to the land which the hh does not have an official government title to but its right of use is granted by the traditional leaders. This user-right agreement does not have to be granted directly by the village leaders as right of access may be passed on through heredity.

Bought: This refers to the area of customary land that has been bought from others. This land does not have an official title and therefore is not leasehold.

Rented from others: Land rented from others for Cash or for a fixed amount in crop produce (eg fixed number of bags at harvest).

Borrowed: Use granted by land owner free of charge. Land owner can either be a lease holder or has right of access through customary law.

Share Cropping: where the hh is permitted to use land which is then paid for from a percentage of the harvested crop.

Section 5.0 Land Use

- **Temporary crops:** are sown and harvested during the same agricultural year

- **Permanent crops:** are sown or planted once and then , they occupy the land for some years and need not to be replanted after each annual harvest. Permanent crops are mainly trees (e.g., apples) but also bushes and shrubs (e.g., berries), palms (e.g., dates), vines (e.g., grapes), herbaceous stems (e.g., bananas) and stemless plants (e.g., pineapples).

- **Mixed Crops:** This is a mixture of two or more crops planted together and mixed in the same plot/field. The two crops can either be randomly planted together or they can be planted in a particular pattern eg intercropping (1 row of maize and 1 row of beans). A field that has been divided into plots for different crops is not mixed. This is further subdivided into:

Permanent Mixed -two or more permanent crops grown together,
Permanent/Temporary Mix - permanent crop and annual crop together,
Temporary Mixed - two or more temporary, annual crops grown together.

- **Pasture Land:** This is an area of owned/allocated land which is set aside for livestock grazing. It can be improved pasture where the farmer has planted grass, applied fertilized or applied other production increasing technologies to improve the grazing. Or it can be rough pasture.

- **Fallow:** This is the area of land that is normally used for crop production, but is not used for crop production during a year or a number of years. This is normally to allow for self generation of fertility/soil structure and is often an integral part of the crop rotation system.

- **Natural Bush:** Land which is considered productive but is not under cultivation or used extensively for livestock production and has naturally growing shrubs and trees.

- **Planted trees:** Land which is used for planting trees for poles or timber

- **Unusable:** Land that is known to be non-productive for agriculture purposes

Uncultivated Usable: This is land that was not used for reasons other than fallow. The reasons could be lack of inputs/money/rainfall/etc

Distance to fields (Q6.1):

-**fields** A field is a contiguous piece of land holding which the farmer considers as a single entity. The field may be divided into plots for growing different crops. A holding may consist of one or more fields in different localities.

Use of Communal Resources (Q6.2):

-**Communal resources** - refers to the place on which all individual households can have access to. It is not individually owned or controlled by one hh.

NOTE: The listed resources refers to communal resources and not those individually owned or part shared. The resource has to be freely accessible to the whole village

Overview to section 4

Section 4.0 - Preliminary note Land Access/ Ownership

Access/Ownership refers to the area utilized by the members of the household. This does not include communal land where the resources are shared between households. It does include official communal land that the hh has sole access to eg a plot for crop farming in the communal area.

Procedures for Questions

Section 4.0 - Land Ownership

1. Ask the respondent if he knows the total area of land the household has sole access to. If he knows make a note in the calculation space
2. Ask the respondent the area of the different land ownership categories the household has sole access to (Q4.1.1 to 4.1.7) and record in the appropriate spaces.
3. Add up the area of the different categories of land and compare it with the total area obtained in step 1 (if the respondent provided the information).
4. If the total area is different find out which one is correct and make amendments where appropriate.

Section 5.0 - Land Use

1. Ask the respondent the area of the different landuse categories the household has sole access to (Q5.1.1 to 5.1.12) and record in the appropriate spaces.
2. Add up the area of the different categories of land and compare it with the total area obtained in section 4.0. The total area should be the same.
3. If the total area is different find out which one is correct and make amendments where appropriate.

Section 6.2 Communal resources

Note: the code "Not available" means that the resource does not exist. The code "Not Used" means that the resource does exist but is not used by the hh.

7.0 ANNUAL CROP AND VEGETABLE PRODUCTION - SHORT RAINY SEASON

7.1.1 Did the hh **plant** any crops during the **Short Rainy** season? (Yes = 1, No=2) If the response is '**NO**' give main reason Then go to section 7.2

7.1.2 For each crop planted during 2002/03 **Short Rainy** season provide the following information

Main Reason (Above) No rains.....1 Rains came too late2 Does not plant annual crops3
 No money 4 Don't get Vuli season ..5 Illness/social problems6
 Has irrigation & does not follow season (give annual production in Masika)7

Crop Name	Crop Code	Land Clearing	Soil preparation	Planting		Inputs						Harvesting & Storage				Marketing			
				Planned area (acres)	Actual Planted area (acres)	% improved seed	Irrigation use	Fertiliser use	Herbicide use	Fungicide use	Pesticide use	How harvested	How threshed	Area Harvested (acres)	main product code	Quantity harvested (Kgs)	Quantity Stored (kgs)	Quantity sold (kgs)	Mostly sold to
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
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Total Planned/Planted						Total area harvested													

7.1.3 Main reason for difference between **Area Planned** and **Area Planted**

7.1.4 Main reason for difference between **Area Planted** and **Area Harvested**

<p>Land Clearing (Col 3)</p> <p>Mostly bush clearance ...1 Mostly hand slashing2 Mostly tractor slashing ...3 Mostly burning4 No land clearing5</p>	<p>Improved seed Use (Col 7)</p> <p>all Improved1 approx 3/4 improved2 approx 1/2 improved3 approx 1/4 improved4 less than 1/4 improved ..5 No improved seed used.6</p>	<p>Fertiliser codes (Col 9)</p> <p>Mostly Farm Yard Manure 1 Mostly Compost2 Mostly Inorganic fertiliser ..3 No fertiliser applied4</p>	<p>Threshed/harvested (Col 13 & 14)</p> <p>By hand1 By draft animal2 By human powered tool3 By engine driven machine...4 Not applicable9</p>	<p>Mostly sold to (Col 20)</p> <p>Neighbour.....01 Local market/trade store02 Secondary Market...03 Tertiary Market04 Marketing Coop05 Farmer Association06 Largescale farm07 Trader at Farm08 Contract Partner ...09 Did not sell10 Other98</p>	<p>Reason for difference between area planned and planted (Q7.1.3)</p> <p>Drought1 Floods2 Access to land preparation tools (Draft animal/tractors).3 Credit4 Access to seeds/planting material.....5 Access to other inputs6 Other7 Not applicable9</p>	<p>Reason for difference between area planted and harvested (Q7.1.4)</p> <p>Drought1 Rain/flood damage2 Fire damage3 Pest damage4 Animal damage5 Theft6 Illness/social problems7 Other8 Not applicable9</p>
<p>Soil preparation Method (Col 4)</p> <p>Mostly tractor ploughing .1 Mostly Oxen ploughing ..2 Mostly Hand cultivation ..3</p>	<p>Irrigation Use (Col 8)</p> <p>Used on all crop1 Used on 3/4 of crop2 Used on 1/2 of crop3 Used on 1/4 of crop4 Used on less than 1/45 Not used6</p>	<p>Agrochemical use codes (Col 10, 11 & 12)</p> <p>Used on all crop1 Used on 3/4 of crop2 Used on 1/2 of crop3 Used on 1/4 of crop4 Used on less than 1/45 Not used6</p>	<p>Main product (Col 16)</p> <p>Dry Grain1 Green cob/green pod2 Green leaves & Stem3 Straw, dry stems etc4 Root, tuber, etc5 Flower eg pyrethrum6 Fruit/bunch7 Other8 Not harvested yet9</p>			

Definitions and working page for page 4

Working table for the calculation of area occupied by annual crop in a mixture

Crop mixture 1	Crop Name	Total area of mix (acre)	Ground area/plant (ACRE)	Total no. of plants	Total ground area of plants (ACRES)
(a)	(b)	(c)	(d)	(e)	(f)
Permanent crop 1			0.00		0 .
Permanent crop 2			0.00		0 .
Permanent crop 3			0.00		0 .
Permanent crop 4			0.00		0 .

Total Area of permanent crops in mix 0 .

REMAINING AREA UNDER TEMPORARY CROPS

	crop%	crop area
Temporary/permanent crop name 1		
Temporary/permanent crop name 2		
Temporary/permanent crop name 3		

Total area check . Crop total check .

Working table for the calculation of area occupied by annual crop in a mixture

Crop mixture 2	Crop Name	Total area of mix (acre)	Ground area/plant (ACRE)	Total no. of plants	Total ground area of plants (ACRES)
(a)	(b)	(c)	(d)	(e)	(f)
Permanent crop 1			0.00		0 .
Permanent crop 2			0.00		0 .
Permanent crop 3			0.00		0 .
Permanent crop 4			0.00		0 .

Total Area of permanent crops in mix 0 .

REMAINING AREA UNDER TEMPORARY CROPS

	crop%	crop area
Temporary/permanent crop name 1		
Temporary/permanent crop name 2		
Temporary/permanent crop name 3		

Total area check . Crop total check .

Land Clearing: Refers to removing trees/bush/grass prior to ploughing
Soil Preparation: Refers to the seedbed preparation (ploughing, harrowing, etc)
Planned Area: Area in Acres the household planned to plant before the season started
Actual Planted Area: The area in Acres the household was able to plant.
Area Harvested: The area in Acres that produced a harvest. This is the same as the area planted minus the area that was destroyed by major flood/pest/ animal/etc damage.

Temporary/Annual Crop:
 Crops which are planted and harvested within a period of 12 months after which time the plants die. Most annual crops are planted and harvested on a seasonal basis.

Crop Codes (Cereals /tubers/roots):

Code	Crop
11	Maize
12	Paddy
13	Sorghum
14	Bulrush Millet
15	Finger Millet
16	Wheat
17	Barley
22	Sweet Potatos
23	Irish potatoes
24	Yams
25	Cocoyams
26	Onions
27	Ginger

Vegetable Codes:

Co	Crop
-de	
86	Cabbage
87	Tomatoes
88	Spinach
89	Carrot
90	Chillies
91	Amaranths
92	Pumpkins
93	Cucumber
94	Egg Plant
95	Water Mellon
96	Cauliflower

Crop Codes Legumes Oil & fruit:

Code	Crop
31	Beans
32	Cowpeas
33	Green gram
35	Chick peas
36	Bambara nuts
37	Field peas
41	Sunflower
42	Simsim
43	Groundnut
47	Soyabeans
48	Caster seed

Cash Crop Codes:

Code	Crop
50	Cotton
51	Tobacco
53	Pyrethrum
62	Jute
19	Seaweed

Instructions for calculating the area of mixed crops in a mixture.

- A. If the mixed crop is mixed annual only enter the total area of the field in the REMAINING AREA UNDER TEMPORARY CROPS. and goto step 1 of these instructions.
 - B. If the mixed crop is mixed permanent and annual try to get the % occupied by the different crops and calculate the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annual crops in the mix, Step C
 - C. Number of trees method to calculate annual crop areas in a peranent-annual crop mix/
 - (i) list each of the permanent crops in column b and enter the ground area per acre for each permanent crop (from instructions for page 6) in column 'd'.
 - (ii) obtain the number of permanent trees in the mix from the respondent and enter the number in column 'e'.
 - (iii) calculate the area occupied by each crop by multiplying column 'd' with column 'e' and sum these to obtain the total area of permanent crops in the mix.
 - (iv) subtract the total area of permanent crops in the mix from the total area of mix and enter the result in the total area under temporary crops.
 - (v) proceed to step 1 to calculate the area under each temporary crop.
1. Enter the name of each annual crop in the mix & estimate the percentage of each crop.
 2. Using the percentages for each crop calculate the area of each crop from the REMAINING AREA UNDER TEMPORARY CROPS.
 3. After completing this exercise for all fields, sum the area of each crop in the mix plus any monocrops and enter totals in section 7.1 col 6.
 4. Obtain an estimate of the planned area for each crop and enter it in column 5
 5. If the area harvested is different to the area planted estimate the harvest area
 6. Once the quantity harvested is obtained calculate the Yield (Metric tonnes/acre) & compare the figure with the norms given in the crop codes box. If it is excessively different check the area and the amount harvested.

7.2 ANNUAL CROP AND VEGETABLE PRODUCTION - LONG RAINY SEASON

7.2.1 Did the hh plant any crops during the LONG RAINY season? (Yes=1 No=2)

If the response is 'NO' give main reason Then go to section 7.3

Main Reason (Above) No rains....1 Rains came too late2 Does not plant annual crops3
No money 4 Illness/social problems ..5

7.2.2 For each crop planted during 2002/03 Long Rainy season provide the following information

Crop Name	Crop Code	Land Clearing	Soil preparation	Planting		Inputs						Harvesting & Storage				Marketing			
				Planned area (acres)	Actual Planted area (acres)	% improved seed	Irrigation use	Fertiliser use	Herbicide use	Fungicide use	Pesticide use	How harvested	How threshed	Area Harvested (acres)	main product code	Quantity harvested (Kgs)	Quantity Stored (Kgs)	Quantity sold (kgs)	mostly sold to
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
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.....																			
Total Planned/Planted						Total area harvested													

7.2.3 Main reason for difference between Area Planned and Area Planted

7.2.4 Main reason for difference between Area Planted and Area Harvested

<p>Land Clearing (Col 3) Mostly bush clearance ...1 Mostly hand slashing2 Mostly tractor slashing ...3 Mostly burning4 No land clearing5</p>	<p>Improved seed Use (Col 7) all Improved1 approx 3/4 improved2 approx 1/2 improved3 approx 1/4 improved4 less than 1/4 improved ..5 No improved seed used.6</p>	<p>Fertiliser codes (Col 9) Mostly Farm Yard Manure 1 Mostly Compost2 Mostly Inorganic fertiliser ..3 No fertiliser applied4</p>	<p>Threshed/harvested (Col13 & 14) By hand1 By draft animal2 By human powered tool.....3 By engine driven machine...4 Not applicable9</p>	<p>Mostly sold to (Col 20) Neighbour.....01 Local market/trade store02 Secondary Market...03 Tertiary Market04 Marketing Coop ...05 Farmer Association06 Largescale farm ...07 Trader at Farm08 Contract Partner ...09 Did not sell10 Other98</p>	<p>Reason for difference between area planned and planted (Q7.2.3) Drought1 Floods2 Access to land preparation tools (Draft animal/tractors).3 Credit4 Access to seeds/planting material.....5 Access to other inputs6 Other8 Not applicable9</p>	<p>Reason for difference between area planted and harvested (Q7.2.4) Drought1 Rain/flood damage2 Fire damage3 Pest damage4 Animal damage5 Theft6 Illness/social problems7 Other8 Not applicable.....9</p>
<p>Soil preparation Method (Col 4) Mostly tractor ploughing .1 Mostly Oxen ploughing ..2 Mostly Hand cultivation ...3</p>	<p>Irrigation Use (Col 8) Used on all crop1 Used on 3/4 crop2 Used on 1/2 crop3 Used on 1/4 of crop.....4 Used on less than 1/4 ...5 Not used6</p>	<p>Agrochemical use codes (Col 10,11 &12) Used on all crop1 Used on 3/4 of crop2 Used on half of crop3 Used on 1/4 of crop4 Used on less than 1/45 Not used6</p>	<p>Main product (Col 16) Dry Grain1 Green cob/green pod.....2 Green leaves & Stem.....3 Straw, dry stems etc4 Root, tuber, etc5 Flower eg pyrethrum6 Fruit/bunch.....7 Others8 Not harvested yet9</p>			

Definitions and working page for page 5

Working table for the calculation of area occupied by annual crop in a mixture

Crop mixture 1	Crop Name	Total area of mix (acre)	Ground area/plant (ACRE)	Total no. of plants	Total ground area of plants (ACRES)
(a)	(b)	(c)	(d)	(e)	(f)
Permanent crop 1			0.00		0 .
Permanent crop 2			0.00		0 .
Permanent crop 3			0.00		0 .
Permanent crop 4			0.00		0 .
Total Area of permanent crops in mix					0 .
REMAINING AREA UNDER TEMPORARY CROPS					
				Temp crop%	Temp crop area
Permanent/Temporary crop name 1					
Permanent/Temporary crop name 2					
Permanent/Temporary crop name 3					
Total area check				Temporary crop total check	

Crop mixture 2	Crop Name	Total area of mix (acre)	Ground area/plant (ACRE)	Total no. of plants	Total ground area of plants (ACRES)
(a)	(b)	(c)	(d)	(e)	(f)
Permanent crop 1			0.00		0 .
Permanent crop 2			0.00		0 .
Permanent crop 3			0.00		0 .
Permanent crop 4			0.00		0 .
Total Area of permanent crops in mix					0 .
REMAINING AREA UNDER TEMPORARY CROPS					
				Temp crop%	Temp crop area
Temporary/permanent crop name 1					
Temporary/permanent crop name 2					
Temporary/permanent crop name 3					
Total area check				Temporary crop total check	

Land Clearing: Refers to removing trees/bush/grass prior to ploughing
Soil Preparation: Refers to the seedbed preparation (ploughing, harrowing, etc)
Planned Area: Area in **Acres** the household planned to plant before the season started
Actual Planted Area: The area in **Acres** the household was able to plant.
Area Harvested: The area in **Acres** that the household got most of its production from. This is the same as the area planted minus the area that was destroyed by major flood/pest/ animal/etc damage

Temporary/Annual Crop: Crops which are planted and harvested within a period of 12 months after which time the plants die. Most annual crops are planted and harvested on a seasonal basis.	Crop Codes (Cereals /tubers/roots): Code Crop 11 Maize 12 Paddy 13 Sorghum 14 Bulrush Millet 15 Finger Millet 16 Wheat 17 Barley 22 Sweet Potatos 23 Irish potatoes 24 Yams 25 Cocoyams 26 Onions 27 Ginger	Vegetable Codes: Code Crop 27 Ginger 86 Cabbage 87 Tomatoes 88 Spinach 89 Carrot 90 Chillies 91 Amaranths 92 Pumpkins 93 Cucumber 94 Egg Plant 95 Water Mellon 96 Cauliflower 20 Garlic	Crop Codes Legumes Oil & fruit: Code Crop 31 Beans 32 Cowpeas 33 Green gram 35 Chick peas 36 Bambara nuts 37 Field peas 41 Sunflower 42 Simsim 43 Groundnut 47 Soyabeans 48 Caster seed
	Cash Crop Codes: Code Crop 50 Cotton 51 Tobacco 53 Pyrethrum 62 Jute 19 Seaweed		

Instructions for calculating the area of mixed crops in a mixture.

- If the mixed crop is mixed annual only enter the total area of the field in the REMAINING AREA UNDER TEMPORARY CROPS. and goto step 1 of these instructions.
- If the mixed crop is mixed permanent and annual try to get the % occupied by the different crops and calculate the area of annual crops outlined in step 1. Otherwise use the number of trees method to calculate the area of annual crops in the mix (Step C).
- Number of trees method to calculate annual crop areas in a permanent-annual crop mix
 - list each of the permanent crops in column b and enter the ground area per acre for each permanent crop (from instructions for page 6) in column 'd'.
 - obtain the number of permanent trees in the mix from the respondent and enter the number in column 'e'.
 - calculate the area occupied by each crop by multiplying column 'd' with column 'e' and sum these to obtain the total area of permanent crops in the mix.
 - subtract the total area of permanent crops in the mix from the total area of mix and enter the result in the total area under temporary crops.
 - proceed to step 1 to calculate the area under each temporary crop.

- Enter the name of each annual crop in the mix & estimate the percentage of each crop.
- Using the percentages for each crop calculate the area of each crop from the REMAINING AREA UNDER TEMPORARY CROPS.
- After completing this exercise for all fields, sum the area of each crop in the mix plus any monocrops and enter totals in section 7.1 col 6.
- Obtain an estimate of the planned area for each crop and enter it in column 5
- If the area harvested is different to the area planted estimate the harvest area
- Once the quantity harvested is obtained calculate the Yield (Metric tonnes/acre) & compare the figure with the norms given in the crop codes box. If it is excessively different check the area and the amount harvested.

7.3 PERMANENT/PERENNIAL CROPS AND FRUIT TREE PRODUCTION

7.3.1 Does your household have any permanent/perennial crops or fruit trees (Yes=1, No=2) 1

7.3.2 For each of the permanent crops and fruit trees owned by the household provide the following information

		Size of production unit			Inputs					Harvesting & Storage					Marketing		
Perm- anent Crop Name	Perman- ent crop/ fruit tree crop Code	MONOCROP	MIXED CROP		Irrig- -at -ion use	Fert- -ilis- -er use	Herb- -ic -ide use	Fun- -gic -ide use	Pest -ici- -de use	Area Harvested (acres)	Number of mature plants	main prod- -uct code	Quantity harvested (kgs)	If no harvest give re- -ason	Quantity Stored (Kgs)	Quantity sold (kgs)	mostly sold to
		Area of Plants/ trees/Bushes in MONO CROP (acres)	Area covered by Permanent Crop in a MIXED CROP (acre)	Number of permanent Plants/trees in a MIXED CROP (5)													
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	
.....																	

<p>Irrigation Use (Col 6)</p> <p>Used on all crop1</p> <p>Used on most crop2</p> <p>Used on half crop3</p> <p>Used on small amount of crop.4</p> <p>Not used on crop5</p>	<p>Fertiliser codes (Col 7)</p> <p>Mostly Farm Yard Manure.....1</p> <p>Mostly Compost2</p> <p>Mostly Inorganic fertiliser3</p> <p>No fertiliser applied4</p>	<p>Agrochemical use codes (Col 8, 9 & 10)</p> <p>Used on all crop1</p> <p>Used on 3/4 of crop2</p> <p>Used on 1/2. of crop3</p> <p>Used on 1/4 of crop4</p> <p>less than 1/4 of crop5</p> <p>Not used6</p>	<p>Main product (Col 13)</p> <p>Dry Grain.....1</p> <p>Green cob/green pod..2</p> <p>Green leaves & Stem..3</p> <p>Straw, dry stems etc ...4</p> <p>Root, tuber, etc5</p> <p>Flower6</p> <p>Fruit/bunch.....7</p> <p>Other8</p> <p>Not harvested yet9</p>	<p>Main Reason for no harvest(Col 15)</p> <p>Crop not harvested yet1</p> <p>Drought2</p> <p>Rain/flood damage3</p> <p>Fire damage4</p> <p>Pest damage5</p> <p>Animal damage6</p> <p>Theft7</p> <p>Other8</p> <p>Not applicable9</p>	<p>Mostly sold to (Col 18)</p> <p>Neighbour.....01</p> <p>Local market/trade store....02</p> <p>Secondary Market03</p> <p>Tertiary Market04</p> <p>Marketing Coop05</p> <p>Farmer Association06</p> <p>Largescale farm07</p> <p>Trader at farm08</p> <p>Contract Partner09</p> <p>Did not sell10</p> <p>Other98</p>
--	--	---	---	--	--

Definitions and working page for page 6

Permanent Crop:

Permanent crops: are sown or planted once and then , they occupy the land for some years and need not to be replanted after each annual harvest. Permanent crops are mainly trees (e.g., apples) but also bushes and shrubs (e.g., berries), palms (e.g., dates), vines (e.g., grapes), herbaceous stems (e.g., bananas) and stemless plants (e.g., pineapples).

Total number of plants:

This includes both mature harvestable plants and immature non harvestable plants.

Number of mature plants: This is the number of plants which bared harvest.

Instructions for Permanent crop mono stands and mixtures

- A.** For fields that are **monocrop permanent**, **ONLY** enter the **area of plants in column 3**.
- B.** For fields that are **mixed permanent** calculate the area of each crop based on the % **occupied by each crop method** (NOT using the number of trees method) and **ONLY** enter the area in **column 4**
- C.** For fields that are **mixed permanent/annual** either:
- **ONLY** enter the **area in column 4** if the area of the permanent crop was based on the % **occupied by each crop method**
- OR**
- **ONLY** enter the **number of trees in column 5** if the number of permanent crop plants was provided

Permanent crops (oils):

Code	Crop	Ground area/plant
44	Palm Oil	0.00049
45	Coconut	0.00037
46	Cashewnut	0.00062

Permanent (Cash crops)

Code	Crop	Ground area/plant
53	Sisal	0.00012
54	Coffee	0.00049
55	Tea	0.00037
56	Cocoa	0.00049
57	Rubber	0.00099
58	Wattle	0.00099
59	Kapok	0.00124
60	Sugar Cane	0.00012
61	Cardamom	0.00049
63	Tamarin	0.00099
64	Cinamon	0.00124
65	Nutmeg	0.00099
66	Clove	0.00074
18	Black Pepper	0.00037
34	Pigeon pea	0.00025
21	Cassava	0.00019
75	Pineapple	0.00006

Permanent Crops:

Code	Crop	Ground area/plant
70	Passion Fruit	0.00074
71	Banana	0.00037
72	Avocado	0.00099
73	Mango	0.00099
74	Papaw	0.00037
76	Orange	0.00074
77	Grapefruit	0.00074
78	Grapes	0.00012
79	Mandarin	0.00074
80	Guava	0.00074
81	Plums	0.00074
82	Apples	0.00074
83	Pears	0.00074
84	Peaches	0.00074
85	Lime/lemon	0.00074
68	Pomelo	0.00099
69	Jack fruit	0.00074
97	Durian	0.00074
98	Bilimbi	0.00074
99	Rambutan	0.00074
67	Bread fruit	0.00099
38	Malay apple	0.00074
39	Star fruit	0.00074

Working Area/calculation space

7.4 Main use of Secondary Products

7.5 Did you use **Secondary Products** from any of your crops during the 2002/03 year. (Yes=1, No=2)

If the response is 'NO' go to section 8.0

7.6 List the **main crops** with **secondary products** and provide the following details:

S/N	Crop name	Crop Code	Secondary product	Prod code	Used for	Unit	Total no of Units	No of units sold	Total value of sold units (Tsh.)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.6.1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.6.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.6.3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.6.4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.6.5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
7.6.6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Main product (Col 4)

Green leaves & Stem...1 Flower ...4
 Straw, dry stems etc ...2 Fruit5
 Root, tuber, etc3 Other8

Mainly used for (Col 5)

Feeding to livestock ..1 Consumed by hh4
 Building material2 Sold5
 Fuel for cooking3 Did not use.....6

Unit (Col 6)

Loose Bundle/bunch1 kg5
 Compressed bunch/Bail...2 Stems6
 Tin3 Sack7
 Bucket4 Other8

8.0 AGROPROCESSING AND BY-PRODUCTS

8.1 Did the household **process** any of the products harvested on the farm during 2002/03 (Yes=1, No=2)

If the response is 'NO' go to section 9.0

8.2 List the **main crops** processed and provide the following details:

S/N	Crop name	Crop Code	Proc-ess-ed	Main Prod-uct code	Used for	Unit	Quantity of main product	Quantity Sold	Where sold	By-Prod-uct code	Used for	Unit	Quantity of by-product	Quantity Sold
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
8.2.1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.2.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.2.3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.2.4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.2.5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
8.2.6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Processed (Col 3)

On farm by hand1
 On farm by machine2
 By neighbours machine...3
 By farmers association ...4
 By Cooperative union5
 By trader6
 On Large scale farm7
 By factory9
 Other8

Main product code (Col 4)

Flour/meal.....1
 Grain2
 Oil3
 Juice4
 Fiber.....5
 Pulp6
 Sheet7
 Other8

Used for (Col 5 & 11)

Household/human consumption ..1
 Fuel for cooking2
 Sale3
 Animal consumption.....4
 Did not use5
 Other8

Where sold (Col 9)

Neighbour.....1
 Local market/trade store2
 Secondary Market3
 Marketing Coop4
 Farmer Association5
 Largescale farm6
 Trader at farm7
 Did not sell9
 Other8

By-product code (Col 10)

Bran01
 Cake02
 Husk03
 Juice04
 Fiber05
 Pulp06
 Oil07
 Shell08
 Other98

Unit (Col 6 & 12)

Loose bundle/bunch1
 Compressed bunch/bail...2
 Tin3
 Bucket4
 kg5
 litre6
 Other8

Definition and working page for page 7					
Temporary/annual crop codes for section 7.4 col 2					General Definition for Section 7.4
Crop Code	Crop Name	Secondary Product Question 7.4	Agroprocessing & bi-products		
			Main Products (Section 8.0)	Bi-product (Sect 8.0)	
				1	2
11	Maize	Stems/straw	Flour	Bran	
12	Paddy	Stems/straw	polished rice grain	husk	
13	Sorghum	Stems/straw	flour		
14	Bulrush Millet	Stems/straw	flour		
15	Finger Millet	Stems/straw	flour		
16	Wheat	Stems/straw	flour	Bran	
17	Barley	Stems/straw	flour	Bran	
21	Cassava	Leaves/stems	flour		
22	Sweet Potatoes	Leaves			
23	Irish potatoes				
24	Yams				
25	Cocoyams				
26	Onions				
27	Ginger				
31	Beans	straw/stems			
32	Cowpeas	straw			
33	Green gram	straw			
34	Pigeon peas	stems			
35	Chick peas	straw			
36	Bambara nuts	straw/stems	oil	cake	
41	Sunflower	Stems	oil	Cake	
42	Simsim	straw	oil	Cake	
43	Groundnut	straw	oil	Cake	
47	Soya beans	straw	oil	Cake	
48	Caster seed	straw	oil	Cake	
75	Pineapple		Juice		
50	Cotton	straw	fibre/seed	oil	cake
51	Tobacco				
53	Pyrethrum	straw	insecticide		
62	Jute		fibre		
86	Cabbage				
87	Tomatoes				
88	Spinach				
89	Carrot				
90	Chillies		dried powder		
91	Amaranths				
92	Pumpkins	leaves			
93	Cucumber				
94	Egg Plant				
95	Water Mellon				
96	Cauliflower				
44	Oil Palm	leaves	oil outer	oil inner	cake
45	Coconut	leaves/husk	milk		
46	Cashewnut	Fruit	fruit juice	shell liquid	
52	Sisal	stems	fibre	oil	
54	Coffee	stems	beans	husks	
55	Tea	stems			
56	Cocoa	stems	cocoa	cocoa butter	
57	Rubber	stems			
58	Wattle	stems			
59	Kapok	stems			
60	Sugar Cane		sugar/juice	molasses	ethanol
61	Cardamom				
71	Banana	leaves/stems	juice		
72	Avocado	stems			
73	Mango	stems	Juice		
74	Paw paw		Juice		
76	Orange	stems	Juice		
77	Grape fruit	stems	Juice		
78	Grapes	stems	Juice		
79	Mandarin	stems	Juice		
80	Guava	stems			
81	Plums	stems			
82	Apples	stems			
83	Pears	stems			
84	Pitches	stems			
85	Lime/Lemon	stems	juice		

General Definition for Section 7.4

Secondary Products: Second most important product from a crop. Eg a household may consider the grain from maize as the primary product and the stems/straw as the secondary product.

Note: Secondary products are NOT the same as bi-products. By-products are the result of a processing activity and are dealt with in section 8.0.

Procedures for Questions

Q 7.6 Details of Secondary Products:

- From the list of crops in Q 7.1.2, 7.2.2 & 7.3.2, ask the respondent if the hh used any secondary products. List the crop names and codes in column 1 and 2 for those crops that the hh used secondary products.
- For the listed crops give details of the secondary products used.
- If no units were sold, enter "0" in columns 8 & 9.

Q 8.0 Agroprocessing & bi-products:

- From the list of crops in Q 7.1.2, 7.2.2 & 7.3.2, ask the respondent if the hh processed any of these crops during the 2002/03 agriculture year. List the crop names and codes in column 1 and 2 for those crops that were processed by the hh.
- For the listed crops give details of the secondary crops used.
- If no main product or bi-product was sold enter "0" in columns 8 & 14.
- If no bi-product was produced enter "0" in columns 10, 11, 12, 13 & 14.

Question Specific Definitions

Agroprocessing and bi-products (Q 8.2)
(Note: Agroprocessing refers to the processing of crops for hh utilisation and for sale)

Main Product (Col 5):

Main Product after processing. Eg for Paddy it may be the polished grain. For Maize it may be flour.

Bi-Product code (Col 11): is the secondary residue after processing, eg for rice it may be the husk. for maize it may be the bran.

Mainly used for (Col 5 & 11):

- Consumed by household can mean eaten or utilised in another way (eg by animals) by the hh.

9.0 CROP STORAGE							
9.1	Did the household store any crops during the 2002/03 agriculture year? (Yes =1, No=2) <input style="float:right;" type="checkbox"/>						
<i>If the response is 'NO' go to section 10.0</i>							
9.2 For each of the listed crops provide the following details on storage							
S/N	Crop Name	Stor- ed Y=1 No=2	Current Quantity Stored (kg)	Method of Storage	Normal duration of storage	Main pur- pose	Estimate
							Estimate Storage loss
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
9.2.1	Maize	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.2	Paddy	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.3	Sorghum/Millet	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.4	Beans, peas, etc	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.5	Wheat	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.6	Coffee	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.7	Cashewnut	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.8	Tobacco	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.9	Cotton	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.10	Groundnuts/bambara	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Main method of Storage (Col 4)

In locally made traditional structure..1
 In Improved locally made structure .2
 In modern store3
 In Sacks/open drum.....4
 In airtight drum5
 Unprotected pile6
 Other8

Duration of Storage (Col 5)

Less than 3 months1
 Between 3 and 6 months2
 Over 6 months3

Main purpose of storage (Col 6)

Food for the household1
 To sell for higher price2
 seed for planting.....3
 Other8

Storage loss (Col 67)

Little or no loss1
 Up to 1/4 loss2
 Between 1/4and 1/2 loss ..3
 Over 1/2 loss4

10.0 MARKETING							
10.1	Did the household sell any crops from the 2002/03 agriculture year? (Yes=1, No=2) <input style="float:right;" type="checkbox"/>						
<i>(If the response is 'YES' or 'NO' go to section 10.2)</i>							
10.2 For each of the following crops what was the main marketing problem faced by the household during 02/03							
	Crop	Main problem		Crop	Main problem	10.3 From the list of marketing problems below, for all produce rank the five most important problems	
	(1)	(2)		(1)	(2)		
10.2.1	Maize	<input type="checkbox"/>	→	10.2.9	Vegetables	<input type="checkbox"/>	
10.2.2	Rice	<input type="checkbox"/>		10.2.10	Tree Fruits	<input type="checkbox"/>	
10.2.3	Sorghum/millet	<input type="checkbox"/>		10.2.11	Cashewnut	<input type="checkbox"/>	10.3.1
10.2.4	Wheat	<input type="checkbox"/>		10.2.12	Cotton	<input type="checkbox"/>	10.3.2
10.2.5	Beans, peas etc	<input type="checkbox"/>		10.2.13	Tobacco	<input type="checkbox"/>	10.3.3
10.2.6	Cassava	<input type="checkbox"/>		10.2.14	Groundnuts/bamabara	<input type="checkbox"/>	10.3.4
10.2.7	Bananas	<input type="checkbox"/>		10.2.15	Trees/timber/poles	<input type="checkbox"/>	10.3.5
10.2.8	Coffee	<input type="checkbox"/>		10.2.16	Fish	<input type="checkbox"/>	

Market problems (Q10.2 & 10.3 (Col 2))

Open market price too low01 Market too far05 Government Regulatory board problems...09
 No transport02 Farmer association problems06 Lack of market Information10
 Transport cost too high03 Cooperative Problems07 Other (specify)98
 No buyer04 Trade Union problems08 Not Applicable99

10.4	What was the main reason for not selling crops during 2002/03 year <input style="float:right;" type="checkbox"/>						
Reason for not selling crops (Q10.4)							
Price too low1 Farmer association problems4 Government regulatory board problems7 Production insufficient to sell.....2 Cooperative Problems.....5 Other (specify)8 Market too far3 Trade Union problems6 Not Applicable9							

Definition and working page for page 8**Question Specific definitions (Section 9.0)****Crop Storage, Section 9****Method of Storage (column 4)**

- **Locally made structure:** The structures that have been inherited from their fore fathers
- **Improved locally made structure:** Traditional structures that have been improved using modern technology.
- **Normal duration of storage:** Often there are stored stocks from different seasons and different years. The normal duration refers to the number of months that the most of the crop is stored for.

Marketing problems Q 10.2 and 10.3 col 2:

- **Farmer Association:** A village or community based group of farmers who have formed an organisation to purchase inputs/sell/store their products in order to achieve a better price for their products.
- **Cooperative Union:** Large inter-village /community organisation set up on a district/regional or national basis for providing inputs, marketing and storing farmers products.
- **Government Regulatory board:** Government control body for setting prices and controlling quality of certain agriculture commodities.

Procedures for Questions**Q 9.2 Details of Crop Storage:**

1. For the crops listed indicate if the household stored any during 2002/03 in column 2.
2. Check that the crops correspond to the crop lists in Q 7.1.2, 7.2.2 & 7.3.2. If there is a difference inquire on the reason why. It is possible that a crop was missed during the enumeration of these questions and if so make necessary amendments
3. For the listed crops give details of storage.

Q 10.2 Details on Crop Marketing:

1. For each of the crops listed indicate the main problems in marketing during 2002/03 in column 2.
2. Check if the crops correspond to the crop lists list in Q 7.1.2, 7.2.2 & 7.3.2. If there is a difference inquire on the reason why. It is possible that a crop was missed during the enumeration of these questions and if so make necessary amendments

Q 10.3 Ranking of market problems:

Rank in order of importance the 5 most important marketing problems from the codes in the Market Problems code box.

Working Area/calculation space

11.0 ON-FARM INVESTMENT								
11.1 Does the household practice irrigation (Yes=1, No=2) <input style="float:right" type="checkbox"/>								
<i>If the response is 'NO' go to section 11.3</i>								
S/N	Source of Irrigation water	Method of obtaining water	Method of application	Irrigatable area (acres)	Area of irrigated land this year (acres)			
	(1)	(2)	(3)	(4)	(5)			
11.1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>			
Source of irrigation water (Col 1) River1 Borehole5 Lake2 Canal6 Dam3 Tap Water7 Well4			Method of obtaining water (Col 2) Gravity1 motor pump4 Hand bucket2 Other8 Hand pump3		Method of application (Col 3) Flood1 Sprinkler2 water hose.....3 Bucket/watering can4			
11.2 Does the household have any erosion control/water harvesting facilities on their land (Yes=1, No=2) <input style="float:right" type="checkbox"/>								
<i>If the response is 'NO' go to section 12.0</i>								
S/N	Type of erosion control/water harvesting structure	Number of structures	Year of construction		Type of erosion control/water harvesting structure	Number of structures	Year of construction	
	(1)	(2)	(3)		(1)	(2)	(3)	
11.2.1	Terraces	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		11.2.5	Tree belts	<input type="text"/> <input type="text"/>	
11.2.2	Erosion control bunds	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		11.2.6	Water harvesting bunds	<input type="text"/> <input type="text"/>	
11.2.3	Gabions/Sandbags	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		11.2.7	Drainage ditches	<input type="text"/> <input type="text"/>	
11.2.4	Vetiver Grass	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>		11.2.8	Dam	<input type="text"/> <input type="text"/>	

12.0 ACCESS TO FARM INPUTS AND IMPLEMENTS									
12.1 Give details of farm inputs used during the 2002/03 agriculture year									
S/N	Input name	Used Yes=1 No=2	Source	Distance to Source	Source of Finance	Reason for not using	Quality of Input	Plan to use next year Yes =1,No=2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
12.1.1	Chemical Fertiliser	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.2	Farm Yard Manure	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.3	Compost	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.4	Pesticide/fungicide	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.5	Herbicide	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.6	Improved Seeds	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.1.7	Other	<input type="checkbox"/>	<input type="text"/> <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Source (Col 3) Cooperative01 Local farmers group02 Local market/Trade Store ...03 Secondary Market04 Development project05 Crop buyers06 Large scale farm07 Locally produced by hh08 Neighbour09 Other (specify)98 Not applicable99		Distance to source (Col 4) Less than 1 Km1 Between 1 and 3km2 between 3 and 10 km...3 Between 10 and 20 km ...4 20km and above5 not applicable9		Source of finance (Col 5) Sale of farm products .1 Other income generating activities ...2 Remittances3 Bank Loan/Credit.....4 produced on farm5 Other8 Not applicable9		Reason for not using (Col 6) Not available1 Price too high2 No money to buy3 Too much labour required..4 Do not know how to use....5 Input is of no use6 Locally produced by hh7 Other8 Not applicable9		Quality of input (Col 7) Excellent1 Good2 Average3 Poor4 Does not work .5 not applicable...9	

Definition and working page for page 9

Overview of Investment activities (Section 11.0)

Investment activities:

Investment activities refer to medium to long term farm development structures and projects. This can be Irrigation structures, erosion and water harvesting structures or other permanent or semi-permanent investment made on the land that the household owns.

Question Specific Definitions (Q 11.1)

Source of irrigation Water (Col 1): The main source of water from which water is obtained for irrigation.

Method of obtaining water (Col 2): The mechanism by which the water is extracted from the source,

Application Method (Col 3): How the water is applied on the field.
 - Flood - is the application of water down the slope of the land by means of gravity
 - Sprinkler - is the application of pressurised water through pipes. The water passes through a device which sprays the water onto the crop from above.

Irrigatable Area (Col 4): The area the irrigation system is designed to cover in acres.

Area of irrigated land this year (Col 5): Area of land under irrigation during the 2002/03 agric year. This is the physical area and NOT the cumulative area of 2 or more croppings.

Q 11.1 Irrigation

1. If the hh practices irrigation give details on the main source, main method of obtaining and applying water.
2. Cross check column 8, Q 7.1.2, 7.2.2 & 7.3.2 to check if irrigation was used on any crops.

Question Specific Definitions (Q 11.3)

Erosion control/water harvesting structure (Col 1)

Terraces: Are structures constructed on the side of a hill to provide a level ground to plant crops. They are often used to trap water for paddy/lowland rice production.

Erosion Control Bunds: These are banks of earth/stones built perpendicular to the slope to slow down water and prevent erosion. They are different to Terraces in that the soil behind the banks are not level.

Gabions: A gabion is a wire mesh box filled with rocks/stones and used to control or prevent gully erosion

Sandbags Used to prevent or control gully erosion

Tree belts/Wind breaks: A band of trees planted perpendicular to the prevailing wind whose main purpose is to slow down wind speed

Water Harvesting bunds: A bank of earth constructed horizontal to the slope of the land to trap water. They are usually banana shaped.

Dam: A bank of earth/material which traps river water to form a catchment of water behind it.

Q 11.3 erosion control/water harvesting

1. Number of structures refers to the number of working/maintained structures and does not include derelict or irreparable structures.
2. Year of construction refers to the year that the structures were first constructed. It is not the year that the structures were last maintained.

Farm Inputs (Q 12.1.1 to 12.1.7)

Farm yard Manure: An organic fertiliser made on farm composed of animal dung.

Compost: An organic fertiliser made on farm from decomposed plant material

Pesticide: Chemical used to either protect the plant from or kill insects, birds, molluscs, mites, etc attacking the plant

Fungicide: is a chemical that is used to protect the plant from or control a fungal disease.

Herbicide: A chemical used to control weeds.

Q 12.0 Farm Inputs

1. Indicate in column 1 whether each of the inputs are used or not.
2. Complete cols 3, 4, 6, and 7 for inputs that are used and place '9' in column 5 (for not applicable).
3. Complete cols 5 & 7 for inputs not used.

NOTE: Cross check column 6, 7, 8 & 9, Q 7.1.2, 7.2.2 & 7.3.2 to check what inputs were used.

12.2 Give details of farm implements and assets used and owned by the household during 2002/03 agriculture year									
S/N	Equipment/Asset Name	Number		Used in 2002/03 Yes 1, No=2	Source of Equip-ment	Source of Fin-ance	Reason for not using	Plan to use next year Yes=1, No=2	
		Owned	rent-ed						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
12.2.1	Hand Hoe	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.2	Hand Powered Sprayer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.3	Oxen	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.4	Ox Plough	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.5	Ox Seed Planter	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.6	Ox Cart	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.7	Tractor	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.8	Tractor Plough	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.9	Tractor Harrow	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
12.2.10	Shellers/threshers	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
		Source of equipment (Col 5) Neighbour.....1 Development project5 Cooperative2 Government6 Local farmers association.....3 Large scale farm7 market/Trade store4 Other (specify)8			Source of finance (Col 6) Sale of farm products1 Other income generating activities .2 Remittances3 Bank Loan4 Credit5 Other8 Not applicable9		Reason for not using (Col 7) Not available1 Price too high2 No money to buy/rent.....3 Too much labour required...4 Equipment/Asset of no use ...5 Other8 Not applicable9		
13.0 USE OF CREDIT FOR AGRICULTURE PURPOSES									
13.1	During the year 2002/03 did any of the hh members borrow money for agriculture (Yes = 1, No = 2) (if the response is 'NO' go to section 13.3)							<input type="text"/>	
13.2 Give details of the credit obtained during the agricultural year 2002/03 (if the credit was provided in kind , for example by the provision of inputs, then estimate the value in 13.2.9)									
	use codes to indicate source	Source "a"		Source "b"		Source "c"			
	Provided to Male = 1, Female 2	<input type="text"/>		<input type="text"/>		<input type="text"/>			
		tick the boxes below to indicate the use of the credit		tick the boxes below to indicate the use of the credit		tick the boxes below to indicate the use of credit			
13.2.1	Labour	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.2	Seeds	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.3	Fertilisers	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.4	Agrochemicals	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.5	Tools/equipment	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.6	Irrigation structures	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.7	Livestock	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.8	Other	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.9	Value of Credit (Tsh.)	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.10	Value of repayment (Tsh.)	<input type="text"/>		<input type="text"/>		<input type="text"/>			
13.2.11	Period of repayment (months)	<input type="text"/>		<input type="text"/>		<input type="text"/>			
Source of credit (Q 13.2-a, b and c) Family, friend or relative...1 Commercial Bank.....2 Cooperative3 Savings & credit Soc4 Trader/trade store5 Private individual6 Religious Organisation/NGO/Project ...7 Other (Specify).....8									
13.3	If the answer to question 13.1 above is 'NO' what is the reason for not using Credit?							<input type="text"/>	
Reason for not using credit (Q13.3) Not needed ...1 Not available ...2 Did not want to go into debt....3 Interest rate/cost too high.....4 Did not know how to get credit....5 Difficult bureaucratic procedure ...6 Credit granted too late ...7 Other (specify) ...8 Dont know about credit9									

Definition and working page for page 10

Question Specific Definitions (Q 12.2)

Farm Implements (Col 1):

Hand powered Sprayer: Knapsack or bicycle pump sprayer

Reason for not using (Col 6): Be careful about using "too much labour required" as this code generally refers to hand hoes only. The codes for this should "**NOT**" be read out to the farmer as a prompt.

Note: If remittance is given as the main source of finance check for a response to remittances in **question 2.2.5**

Question Specific Definitions (Q 13.0)

Section 13.0 Credit for Agriculture Purposes

Credit is defined as finance in the form of cash or in-kind contributions (eg direct provision of inputs, machinery, livestock or other material) for the purpose of crop and livestock production whereby the value of the credit must be paid back to the borrower. The value of repayment may either be with interest or interest free.

Credit may be paid back in the form of cash or agriculture produce.

Section 13.0 Credit for Agriculture Purposes

Value of credit: is the amount in cash received from the borrower. If the credit was paid in-kind, estimate the value of this.

Value of repayment: This is the amount to be repaid to the borrower and includes the principal amount (value of credit) plus any interest repayment. If the credit is paid back in agriculture produce, then the cash value of this must be estimated.

Period of repayment: This is the time in **months** the borrower has given for full repayment.

Procedures for questions

Q 12.0 Farm Inputs

1. Indicate in column 2 and 3 whether each of the implements were used or not.
2. Complete cols 4, 5, 6, and 8 for inputs that are used and place '9' in column 7 (for not applicable).
3. Complete cols 7 & 8 for inputs not used.

Section 13.2 Source of agriculture credit

If the farmer obtained credit from more than one source then use the columns "a", "b" and "c" for the different sources of credit. Start with the main source of credit in column "a".

NOTE: Check for use of inputs in column 7, 8 & 9 of questions 7.1.2, 7.2.2 & 7.3.2.

Working Area/calculation space

14.0 TREE FARMING/AGROFORESTRY

14.1 Did your household have any **Planted Trees** on your land during 2002/03 agric year? (Yes =1, No=2)
If the response is 'NO' go to section 14.3

14.2 Give details of the **planted trees** you have on your land.

S/N	Tree Code	Number of trees	Where planted	Main Use	Secondary Use	Number of Plank trees Sold	Number of Pole trees Sold	hh utilised		Total Value (Tsh.)
								Poles	Timber	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
14.2.1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14.2.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14.2.3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14.2.4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Where Planted (Col 3)
 Mostly on field/plot boundaries...1
 Mostly scattered in fields2
 Mostly in plantation/coppice ...3

Use (Col 4 & 5)
 Planks/Timber.....1 Shade5
 Poles2 Medicinal.....6
 Charcoal3 Other8
 Fuel wood4

14.3 Does your village have a **Community tree planting scheme** (Yes=1, No=2)
If the response is 'NO' go to section 15.0

14.4 Household involvement in **community tree planting scheme**

S/N	Distance to community planted forest (Km)	hh Involvement	Main purpose	Main use during 2002/03
	(1)	(2)	(3)	(4)
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

HH involvement (Col 2)
 Only planting1
 Only protection and thinning.....2
 Only cutting3
 Most or all activities.....4

Main Purpose (Col 3)
 Erosion control.....1 Environment rehabilitation ...4
 Production of poles2 Restoration of wildlife5
 production of firewood...3 Other (specify)8

Main Use during 02/03(Col 4)
 Poles1 Not ready to use5
 Timber logs2 Not allowed to use ...6
 Charcoal3 Other (specify)8
 Firewood4

15.0 CROP EXTENSION SERVICES

15.1 Did your household receive **extension advice for crop production** during 2002/03 (Yes=1,No=2)
If the response is 'NO' go to section 16.0

S/N	Extension Provider	Source of extension (Y=1,N=2)	If you pay for extension, what is the cost/yr	Contact farmer /group member (Yes=1,No=2)	No. of visits by extension agency per year	No. of message adopted in the last 3 years	Quality of Service
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
15.1.1	Government extension	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15.1.2	NGO/development project	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15.1.3	Cooperative	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15.1.4	Large Scale farmer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15.1.5	Other.....	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Quality of service (Col 7)
 Very good1 good2 Average.....3 Poor.....4 No Good5

Definition and working page for page 11

General Definitions for section 14.0

Tree Farming/Agroforestry

This section refers to trees **planted** for wood (firewood, poles, planks, carving, charcoal, medicinal, etc, but **NOT** fruit trees). It does **not** include naturally growing trees on the farm (unless special care has been given to promote their establishment) or trees growing naturally on the communal areas.

Tree farming is the planting of trees on an area of land for which the main purpose is the production and regeneration of trees for wood on that land.

Agroforestry: is the planting of trees on land for the purpose of complementing other farming activities like crop and animal production. For the purpose of this questionnaire Agroforestry trees are trees planted on boundaries and scattered throughout fields. The main productive unit in this case is Crops and Livestock.

Section 14.2 Details of planted trees

1. Enter the tree codes of the main species grown by the hh
2. If no planks or poles are sold enter a "0" in columns 8, & 9.
3. Total value includes both value of hh utilised trees and sold trees.
4. If no trees were utilised by the hh or sold enter "0" in column 10

Question Specific Definitions

Tree farming (Section 14.0)

Pole trees (Col 6): These are young trees which have a maximum diameter of 6 inches at the bottom and are often used for house construction. They are often the thinning harvest after 3 - 5 years.

Plank trees (Col 7): Trees for sawing into timber planks.

Animal shade: Trees grown for the purpose of providing shade to animals.

Community tree planting scheme (Section 14.3)

Community Forest: A forest planted on the communal land which is planted, replanted or spot planted by the members of the village.

Crop Extension Services (Section 15.1)

Contact Farmer: A farmer who is used by the extension agent as a focal point to demonstrate new interventions. The contact farmer then passes on the message to other farmers

Group member: Member of a group under which the contact farmer leads

Adoption: This is the uptake of an intervention for 2 or more years

Section 15.1 Crop Extension Services

1. For each of the extension providers ask if the hh received extension during 2002/2003 agriculture year and indicate in column 2.
2. For each of the providers complete the rest of the columns

Tree Name Guide Col 1

Code	Local Name	Botanical Name	English Name
01		<i>Senna siamea</i>	Cassod tree
02	Msongoma	<i>Gravellia</i>	Silver oak
03	Mbarika	<i>Azelia quanzensis</i>	Pod mahogany
04	Mkeshia	<i>Acacia spp</i>	Umbrella thorn
05	Msindano	<i>Pinus spp</i>	Pine
06	Mkaratusi	<i>Eucalyptus spp</i>	Red River Gum
07		<i>Cyprus spp</i>	Cyprus tree
08	Mtndoo	<i>Calophyllum inophyllum</i>	
09	Mvule	<i>Melicia excelsa</i>	Iroko
10	Mvinji	<i>Casurina equisetifolia</i>	Whistling oak
11	Msaji	<i>Tectona grandis</i>	Teak
12	Mkungu wa kienyeji	<i>Terminalia catapa</i>	Sea almond
13	Mkungu india	<i>Terminilia ivorensis</i>	Black afara
14	Muhumula	<i>Maesopsis berchemoides</i>	
15			

Code	Local Name	Botanical Name	English Name
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

15.2 Crop Extension Messages									
S/N	Extension Message	Received Advice Yes=1 No=2	Adopted Yes=1 No=2	Source of Crop Extension	S/N	Extension Message	Received Advice Yes=1 No=2	Adopted Yes=1 No=2	Source of Crop Extension
	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
15.2.1	Spacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.9	Crop Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.2	Use of agrochemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.10	Vermin control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.3	Erosion control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.11	Agro-processing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.4	Organic fertiliser use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.12	Agro-forestry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.5	Inorganic fertiliser use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.13	Bee Keeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.6	Use of improved seed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.14	Fish Farming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.7	Mechanisation/LST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.2.15	Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.2.8	Irrigation Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Source of extension (Col 4) Government1 NGO/Dev project ...2 Cooperative ...3 Large scale farmer4 Other (Specify) ...8 Not applicable9									

16.0 LIVELIHOOD CONSTRAINTS				
From the list of constraints on the right select:				List of constraints
16.1	the 5 most important problems		16.2	the 5 least important problems
	Order of most importance	Constraint		Order of least importance
	(1)	(2)		(1)
16.1.1	most important	<input type="checkbox"/>	16.2.1	Least important
16.1.2	2nd most important	<input type="checkbox"/>	16.2.2	2nd least important
16.1.3	3rd most important	<input type="checkbox"/>	16.2.3	3rd least important
16.1.4	4th most important	<input type="checkbox"/>	16.2.4	4th least important
16.1.5	5th most important	<input type="checkbox"/>	16.2.5	5th least important
17.0 ANIMAL CONTRIBUTION TO CROP PRODUCTION				
17.1	Did you use Draft animals to cultivate your land during 02/03 (Yes=1, No=2) <input type="checkbox"/>			
(If no, go to question 17.2)				
S/N	Type of Draft	Number owned	Number used	Area cultivated (acres)
	(1)	(2)	(3)	(4)
17.1.1	Oxen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.1.2	Bulls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.1.3	Cows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.1.4	Donkeys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.2	Did you apply organic fertiliser during 02/03 (Yes=1, No=2) <input type="checkbox"/>			
(If no, go to question 18)				
S/N	Type of organ Fertiliser	Area applied (acres)		
	(1)	(2)		
17.2.1	FYM	<input type="checkbox"/>		
17.2.2	Compost	<input type="checkbox"/>		
1. Access to Land 2. Ownership of Land 3. Poor farm Inputs 4. Soil Fertility 5. Access to improved seed 6. Irrigation facilities 7. Access to chemical Inputs 8. Cost of Inputs 9. Extension Services 10. Access to forest resources 11. Hunting and Gathering 12. Access to potable water 13. Access to credit 14. Harvesting 15. Threshing 16. Storage 17. Processing 18. Market Information 19. Transport costs 20. Distruction by animals 21. Stealing 22. Pests and Diseases 23. Local government taxation 24. Access to off Farm Income				

Definitions and working page for page 12

Question Specific Definitions

Crop Extension Advice (Section 15.2)

Mechanisation/LST: LST means Labour Saving Technology

Section 16.0 Livelihood constraints

16.1 List the five most important problems in order of most importance:

1. Read out the list of constraints to the respondent and ask him to select the ones that are a problem. Place a ✓ against the constraints that are a problem.
2. Read the selected constraints and ask the farmer to select 5 which create the largest problems
3. Ask the farmer to list these in order of importance and enter in column 2

16.2 List the five least important problems in order of least importance:

1. Read out the list of constraints to the respondent and ask him to select the ones that are **NOT** a problem. Place an ✗ against the constraints that are **NOT** a problem.
2. Read the selected constraints and ask the farmer to select 5 which create the least problems
3. Ask the farmer to list these in order of least importance and enter in column 2

Definitions and working page for page 13**General definitions for page 13**

Cattle Intake during 2002/03: Cattle purchased, given or born which increases the number of cattle in the herd.

Cattle Offtake during 2002/03:

Cattle removed from the herd, either by selling, hh consumption, given away or stolen.

Question Specific Definitions (Section 18.0)**Cattle type (Q 18.2 & 18.4, Col 1)**

Bull: Mature **Uncastrated** male cattle used for breeding

Cow: Mature female cattle that has given birth at least once

Steer: Castrated male cattle over 1 year

Heifer: Female cattle of 1 year up to the first calving

Calves: Young cattle under 1 year of age

Average Value per Head (Q 18.3, (Col 7 & 9) & 18.4 (Col 3, 5 & 7))

In these columns give the average value per head during 2002/03. For given, traded, consumed by the hh & given away/stolen estimate the value.

Cattle vaccination (18.5 col 1)

ECF: East Coast Fever

FMD: Foot and Mouth Disease

CBPP: Contagious Bovine Pleura Pneumonia

Section 18.0 Cattle Population, Intake & Offtake.

NOTE: Section 18.1 is for the current population (as of 1st October 2003); Section 18.2 and 18.3 is for movement in and out of the herd during the 2002/03 agriculture year. Section 18.4 is for diseases encountered during the agriculture year.

1. If the household has cows, you would normally expect them to have calves in column 8

2. If calves are reported in column 2, 3, or 4 (18.2.6, 18.2.5) then there must be at least that number repeated in column 8

Note: If the farmer reports sales of cattle the importance of this must be reflected in Q 2.2.3

Section 18.5 If cattle are reported to have died in Column 5 then at least that number should be reported in 18.4 col 4

Working area for page 13

19.0 GOAT POPULATION, INTAKE AND OFFTAKE															
19.1 Did the household own, raise or manage any GOATS during the 2002/03 agriculture year? (Yes =1 No =2) <input type="checkbox"/>															
19.2 Goat Population as of 1st October 2003					19.3 Goat Intake during 2002/2003										
S/N	Goat type	Number of Indigenous	Number of Improved		Total	S/N	Number Purchased	Number given /obtained	Number Born	Total Intake of Goats	Average Value per head				
	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)				
19.2.1	Billy Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.3.1	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
19.2.2	Castrated Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.3.2	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
19.2.3	She Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.3.3	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
19.2.4	Male Kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.3.4	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>				
19.2.5	She Kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.3.5	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>				
Grand Total					<input type="text"/>	Total Intake					<input type="text"/>				
19.4 Goat Offtake during 2002/2003								19.5 Goat diseases							
S/N	Goat type	Number Sold/traded	Number consumed by hh	Number given away/stolen	Number died	Total Goat Offtake	Average value per head	S/N	Disease/parasite	Number Infected	Number Treated	No. Rec-oved	Number Died	Last vacci nated	Main Sou -rce
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(1)	(2)	(3)	(4)	(5)	(6)	(7)
19.4.1	Male goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>								
19.4.2	Castrated Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.5.1	Foot Rot	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	X
19.4.3	She Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.5.2	CC PP	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
19.4.4	Male Kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.5.3	Helminthiosis	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	X
19.4.5	She Kid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	19.5.4	Tetanus	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
Total Offtake						<input type="text"/>		19.5.5	Mange	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	X
19.6 Milk Production							<u>Sold to Q19.6 Col 5)</u> Neighbour.....1 Largescale farm ..5 Local Market.....2 Trader at Farm ...6 Secondary Market ...3 Did not sell7 Processing industry .4 Other8				<u>Last Vaccinated (Col 6)</u> 20031 20004 20022 before 20005 20013 Not Vaccinated...6				
S/N	Season	Litres of milk/day	No. of Goats milked/day	Value/litre	Sold to	Sold/day (Litres)					<u>Main Source of vaccine (Col 7)</u> Private Vet Clinic ..1 Other8 District Vet Clinic ..2 Not Vaccinable9 NGO/Project.....3				
	(1)	(2)	(3)	(4)	(5)	(6)									
19.6.1	Wet Season	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>									
19.6.2	Dry Season	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>									

Definitions and working page for page 14

Goat definitions for page 14

Goat Intake during 2002/03: Goat purchased, given or born which increases the number of goats in the herd.

Goat Offtake during 2002/03:

Goat removed from the herd, either by selling, hh consumption, given away or stolen.

Question Specific Definitions (Section 19.0)

Goat type (Q 19.2 & 19.4, Col 1)

Billy Goat (he-goat): Mature **Uncastrated** male goat used for breeding

Castrated goat: Male goat that has been castrated.

She Goat: Mature female goat over 9 months of age

Kid: Young goat under 9 months of age.

Average Value per Head (Q 19.3, (Col 7 & 9) & 19.4 (Col 3, 5 & 7))

In these columns give the average value per head during 2002/03. For given, traded, consumed by the hh & given away/stolen estimate the value.

Goat vaccination (19.5 col 1)

FMD: Foot and Mouth Disease

CCPP: Contagious Caprine Pleura Pneumonia

LSD: Lumpy Skin Disease

Section 19.0 Goat Population, Intake & Offtake.

NOTE: Section 19.1 is for the current population (as of 1st October 2003); Section 19.2 and 18.3 is for movement in and out of the herd during the 2002/03 agriculture year. Section 19.4 is for diseases encountered during the agriculture year.

1. If the household has she goats, you would normally expect them to have kids in column 8
2. If kids are reported in column 2, 3, or 4 (19.2.6, 19.2.5) then there must be at least that number repeated in column 8

Note: If the farmer reports sales of goats the importance of this must be reflected in Q 2.2.3

Section 19.5 If goats are reported to have died in Column 5 then at least that number should be reported in 19.4 col 4

Working area for page 14

20.0 SHEEP POPULATION, INTAKE AND OFFTAKE															
20.1	Did the household own, raise or manage any SHEEP during the 2002/03 agriculture year? (Yes =1 No =2) <input type="checkbox"/>														
(If no go to section 21.0)															
20.2	Sheep Population as of 1st October 2003				20.3	Sheep Intake during 2002/2003									
S/N	Sheep type	Number of Indigenous	Number of Improved		Total	S/N	Number Purchased	Number given /obtained	Number Born	Total Intake of Sheep	Average Value per head				
	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)	(9)	(10)				
20.2.1	Ram	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	20.3.1	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
20.2.2	Castrated Sheep	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	20.3.2	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
20.2.3	She Sheep	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	20.3.3	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	<input type="text"/>				
20.2.4	Male lamb	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	20.3.4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
20.2.5	She lamb	<input type="text"/>	<input type="text"/>	X X X	<input type="text"/>	20.3.5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>				
Grand Total					<input type="text"/>	<input type="text"/>									
20.4	Sheep Offtake during 2002/2003						20.5	Sheep diseases							
S/N	Sheep type	Number Sold/traded	Number consumed by hh	Number given away/stolen	Number died	Total Sheep Offtake	Average value per head	S/N	Disease/parasite	Number Infected	Number Treated	No. Rec-oved	Number Died	Last vaccinated	Main Source
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(1)	(2)	(3)	(4)	(5)	(6)	(7)
20.4.1	Ram	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20.4.2	Castrated Sheep	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20.5.1	Foot Rot	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	X
20.4.3	She Sheep	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20.5.2	CC PP	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20.4.4	Male lamb	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20.5.3	Helminthiosis	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	X
20.4.5	She lamb	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	20.5.4	Trypanosomiasis	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Offtake						<input type="text"/>	<input type="text"/>								
										<p>Last Vaccinated (Col 6) 20031 20004 20022 before 20005 20013 Not Vaccinated...6</p> <p>Main Source of vaccine (Col 7) Private Vet Clinic ..1 Other8 District Vet Clinic ..2 Not applicable9 NGO/Project.....3</p>					

Definitions and working page for page 15**Sheep definitions for page 15**

Sheep Intake during 2002/03: Sheep purchased, given or born which increases the number of Sheep in the herd.

Sheep Offtake during 2002/03:
Sheep removed from the herd, either by selling, hh consumption, given away or stolen.

Question Specific Definitions (Section 20.0)**Sheep type (Q 20.2 & 20.4, Col 1)**

Ram: Mature **Uncastrated** male goat used for breeding

Castrated sheep: Male sheep that has been castrated.

Ewe: Mature female sheep over 9 months of age

Lamb: Young sheep under 9 months of age.

Average Value per Head (Q 20.3, (Col 7 & 9) & 20.4 (Col 3, 5 & 7))

In these columns give the average value per head during 2002/03. For given, traded, consumed by the hh & given away/stolen estimate the value.

Sheep vaccination (20.5 col 1)

FMD: Foot and Mouth Disease

CCPP: Contagious Caprine Pleura Pneumonia

Section 20.0 Sheep Population, Intake & Offtake.

NOTE: Section 20.1 is for the current population (as of 1st October 2003);
Section 20.2 and 20.3 is for movement in and out of the herd during the 2002/03 agriculture year.
Section 20.4 is for diseases encountered during the agriculture year.

1. If the household has ewes, you would normally expect them to have kids in column 8
2. If lambs are reported in column 2, 3, or 4 (20.2.6, 20.2.5) then there must be at least that number repeated in column 8

Note: If the farmer reports sales of Sheep the importance of this must be reflected in Q 2.2.3

Section 20.5 If Sheep are reported to have died in Column 5 then at least that number should be reported in 20.4 col 4

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21.0 PIG POPULATION AND PRODUCTION															
21.1		Did the household own, raise or manage any PIGS during the 2002/03 agriculture year (Yes =1 No =2) <input type="checkbox"/>													
21.2		PIG Population as of 1 st October 2003											21.3 Pig increase during 2002/2003		
S/N	Pig type	Number													
	(1)	(2)													
21.2.1	Boar	<input type="text"/>													
21.2.2	Castrated male	<input type="text"/>													
21.2.3	Sow/Gilt	<input type="text"/>													
21.2.4	Male piglet	<input type="text"/>													
21.2.5	She piglet	<input type="text"/>													
Grand Total		<input type="text"/>													
21.4 Pig decrease during 2002/2003								21.5 Pig diseases/pests/conditions							
S/N	Pig type	Number Sold/traded	Number consumed by hh	Number given away/stolen	Number died	Total Pig Offtake	Average value per head	S/N	Disease/ parasite	Number Infected	Number Treated	No. Rec- overed	Number Died	Last vacci- nated	Main Sou- rce
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(1)	(2)	(3)	(4)	(5)	(6)	(7)
21.4.1	Boar	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21.4.2	Castrated male	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	21.5.1	Anthrax	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21.4.3	Sow/Gilt	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	21.5.2	ASF	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
21.4.4	Male piglet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	21.5.3	Anemia	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
21.4.5	She piglet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	21.5.4	Helmenthiosis	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total Offtake						<input type="text"/>									
22.0 LIVESTOCK PEST & PARASITE CONTROL								22.3 Do you normally encounter a tick problem (Yes=1, No=2) <input type="checkbox"/>				Last Vaccinated (Col 6) 2003 ..1 20004 2002 ..2 before 20005 2001 ...3 Not Vaccinated.6			
								(If the response is 'NO' go to section 22.5)							
22.1 Did you deworm your animals during 2002/03 (Yes=1, No=2) <input type="checkbox"/>								22.4 Which methods of tick control did you use <input type="checkbox"/>				Main Source (Col 7) Private Vet Clinic ..1 District Vet Clinic ..2 NGO/Project3 Other8 Not applicable9			
								Control method (Q 22.4) None..1 Spraying ..2 Dipping..3 Smearing ..4 Other.8							
								22.5 Do you normally encounter a tsetse fly problem (Y=1, N=2) <input type="checkbox"/>							
								(If the response is 'NO' go to section 23.0)							
22.2 Which animals did you deworm ? (Tick appropriate boxes)								22.6 Which methods of control did you use <input type="checkbox"/>							
Cattle <input type="checkbox"/> Goats <input type="checkbox"/> Sheep <input type="checkbox"/> Pigs <input type="checkbox"/>								Control method (Q22.6) None .1 Spray .2 Dipping .3 Trapping .4 Other .8							

Definitions and working page for page 16**Pigs definitions for page 16**

Pig Intake during 2002/03: Pigs purchased, given or born which increases the number of Pigs in the production unit.

Pig Offtake during 2002/03:

Pigs removed from the production unit, either by selling, hh consumption, given away or stolen.

Question Specific Definitions (Section 21.0)**Pigs type (Q 21.2 & 21.4, Col 1)**

Boar: Mature **Uncastrated** male pig used for breeding

Castrated Pig: Male pig that has been castrated.

Sow: Mature female pig that has given birth to at least one litter of pigs.

Gilt: Female pig of 9 months up to the first farrowing.

Piglet: Young pig under 3 months of age.

Average Value per Head (Q 21.3, (Col 7 & 9) & 21.4 (Col 3, 5 & 7))

In these columns give the average value per head during 2002/03. For given, traded, consumed by the hh & given away/stolen estimate the value.

Pig vaccination (21.5 col 1)

ASF: African Swine Fever

Section 21.0 Pig Population, Intake & Offtake.

NOTE: Section 21.1 is for the current population (as of 1st October 2003); Section 21.2 and 21.3 is for movement in and out of the herd during the 2002/03 agriculture year. Section 21.4 is for diseases encountered during the agriculture year.

1. If the household has sows, you would normally expect them to have piglets in column 8
2. If piglets are reported in column 2, 3, or 4 (20.2.6, 20.2.5) then there must be at least that number repeated in column 8

Note: If the farmer reports sales of Pigs the importance of this must be reflected in Q 2.2.3

Section 20.5 If Pigs are reported to have died in Column 5 then at least that number should be reported in 20.4 col 4

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23.0 Other Livestock currently available and details of consumption and sales during the last 12 months										
	Animal type	Current		Sold during 2002/03		Consumed during 2002/03				
		Number		Number	Average Value/head	Number	Average Value/head			
		(1)		(2)	(3)	(4)	(5)			
23.1	Indigenous Chicken	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.2	Layer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.3	Broiler	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.4	Ducks	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.5	Turkeys	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.6	Rabbits	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.7	Donkeys	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
23.8	Horses	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X X X	X X X X X			
23.9	Other	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			
24.0	CHICKEN DISEASES	Number infected		Number Treated		Number Died		Number Recovered		
24.1	Newcastle Disease	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
24.2	Gumboro	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
24.3	Coccidiosis	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
24.4	Chorysa	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
24.5	Fowl typhoid	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
25.0	LIVESTOCK PRODUCT	Sold during 2002/03				Consumed/utilised during 2002/03				
		Number				Average Value/unit				
25.1	Eggs	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	X	<input type="text"/>	<input type="text"/>	<input type="text"/>	
25.2	Hides	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
25.3	Skins	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
26.0	List in order of importance the outlets for the sale of Livestock						27.0 Access to functional Livestock structures /accessories			
S/N	Impo-rtan-ce of outlet	Outlets for Cattle	Out-lets for Goat	Outlets for Sheep	Outl-ets for Pigs	Outlets for Chick-ens	S/N	Type of structure/ accessory	Source of Structure	Distance to struct-ure (Km)
	(1)	(2)	(3)	(4)	(5)	(6)		(1)	(2)	(3)
26.1	1st	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	27.1	Cattle Dip	<input type="text"/>	<input type="text"/>
26.2	2nd	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	27.2	Spray Race	<input type="text"/>	<input type="text"/>
26.3	3rd	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	27.3	Hand powered sprayer	<input type="text"/>	<input type="text"/>
26.4	4th	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	27.4	Cattle crush	<input type="text"/>	<input type="text"/>
26.5	5th	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	27.5	Primary Market	<input type="text"/>	<input type="text"/>
Outlet code (Col 2, 3, 4 & 5) Trader at farm1 Abattoir/factory.....5 Local Market2 Another farmer6 Secondary market/auction.....3 Other (Specify).....8 Neighbour4							27.6	Secondary Market	<input type="text"/>	<input type="text"/>
Source of structure (Q27.0 - Col 2) Owns1 NGO6 Cooperative2 Large scale farm7 Local farmers association3 Other8 Gov extension/veterinary4 Not applicable9 Development project5							27.7	Abattoir	<input type="text"/>	<input type="text"/>
							27.8	Slaughter Slab	<input type="text"/>	<input type="text"/>
							27.9	Hide/skin shed	<input type="text"/>	<input type="text"/>
							27.10	Input supply	<input type="text"/>	<input type="text"/>
							27.11	Veterinary Clinic	<input type="text"/>	<input type="text"/>
							27.12	Village holding ground	<input type="text"/>	<input type="text"/>
							27.13	village watering point/dam	<input type="text"/>	<input type="text"/>
							27.14	Drencher	<input type="text"/>	<input type="text"/>

Definition and working page for page 17

Question Specific Definitions Section 26.0)

Procedures for questions

Section 23.0 - Other Livestock:

1. The current number includes both adult and young animals. For example The number of chickens in col 1 would include adults and chicks.

Question Specific Definitions Section 27.0)

Access to functional Livestock Structures/accessories (Section 27.0):

NOTE: The structures must be functional. If they are not working/derelect then they should not be included. The distance to the next nearest functional structure should be taken.

Spray Race: A fixed spray structure on an animal race for spraying acaricide

Cattle crush: Corridor structure for restraining cattle.

Abattoir: Large building designed for slaughtering a large amount of animals. It normally has complex structures to assist in the slaughter and storage and a high level of hygiene is maintained.

Slaughter Slab: Concrete slab designed for slaughtering a small amount of animals

Hides: obtained from Cattle

Skins: Obtained from sheep and goats

Hide/Skin Shed: Shed for curing/tanning animal skins and hides

Village holding Pen: Enclosure for containing large amount of livestock which is owned communally.

Drencher: Device for orally administering medicine to livestock. If no product was sold in 2002 enter "0" in columns 6, 7 & 9.

Section 26.0 - Outlets for livestock:

Using the codes enter the outlets for the sale of different livestock in order of importance. If there are, for example, only 2 outlets mark the rest with a "X".

28.0 FISH FARMING

28.1 Was **Fish farming** carried out by this household during 2002/2003? (Yes =1, No=2) (If the response is 'NO' go to section 29.0)

28.2 Specify details of **fish farming practices**

S/N	Product ion unit number	Fish farming system	Size of unit/pond (m2)	Source of fingerling	frequency of stocking (No/year)	Number of stocked fish			Number of fish harvested	weight of fish harvested	weight of fish sold	Mainly sold to
						Tilapia	Carp	Other				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
28.1.1	1	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
28.1.2	2	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
28.1.3	3	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Farming System (Col 2)
 Natural Pond...1 Natural Lake...3 Other...8
 Dug out pond...2 Water reservoir...4

Source of fingerlings (Col 4)
 Own pond...1 NGO/Project...3 Private trader...5
 Government Institution...2 Neighbour...4 Other...8

Mainly sold to (Col 12)
 Neighbour...1 Secondary Market...3 Large scale farm...5 Did not sell...7
 Local Market...2 Processing industry...4 Trader at Farm...6 Other...8

29.0 LIVESTOCK EXTENSION

29.1 Did you receive **livestock extension advice** during 02/03 (Yes=1, No=2) (If the response is 'NO' go to section 30.0)

S/N	Livestock Extension Message	Received Advice Yes=1, No=2	Adopted Yes=1 No=2	Source of Livestock Extension
	(1)	(2)	(3)	(4)
29.1.1	Feed and Proper feeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.2	Housing (Goat, Dairy, Poultry, Pigs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.3	Proper Milking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.4	Milk Hygiene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.5	Disease control (dipping/spraying)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.6	Herd/Flock size and selection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.7	Pasture Establishment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.8	Group formation and strengthening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.9	Calf rearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.10	Use of improved bulls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.1.11	Other livestock extension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source of livestock extension (Col 4)
 Government...1 NGO/Dev project...2 Cooperative...3 Large scale farmer...4 Other (Specify)...8

29.2 For the following **Livestock Extension Service Providers** give details

S/N	Extension Provider	If you pay for extension, what is the cost/yr	Contact farmer/group member (Y=1, N=2)	No. of visits by extension agency/year	No. of mess -ages adopted in the last 3 yrs	Quality of Service
	(1)	(2)	(3)	(4)	(5)	(6)
29.2.1	Government	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
29.2.2	NGO/dev project	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
29.2.3	Cooperative	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
29.2.4	Large Scale farmer	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
29.2.5	Other.....	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Quality of service (Col 6) Very good...1 good...2 Average...3 Poor...4 No Good...5

30.0 GOVERNMENT REGULATORY PROBLEMS

31.1 Did you face problems with government regulations during 2002/03 (Y=1, N=2) (If the response is no go to section 31.0)

	Problem code	Problem code
30.1.1	1st	Land ownership by government...1 Restriction of sale between regions...2
30.1.2	2nd	Import of food items...3
30.1.3	3rd	Other (specify)...8

Definitions and working page for page 18**General definitions for Section 28.0**

Fish farming: Refers to the rearing/production of fish. It is different to fishing in that the fish have to be reared and fed in fish farming. Fishing traps or captures naturally occurring fish in rivers, lakes and the sea and should not be included in this section.

Question Specific Definitions (Section 28.2)

Production unit number (Col 1): A production unit is a pond river/lake which is treated as a separate entity for the production of fish eg it may be by virtue of manageable size, maturity of fish, type of fish etc. Eg a farmer may have 3 fish ponds. (each one is a separate production unit).

Frequency of stocking (Col 5): What is the number of times the farmer puts new fingerlings into the pond each year.

Fingerlings: These are young immature fish used for stocking ponds.

Sold: (Col 10 & 11)

If no fish were sold enter "0" in column 10 and 11)

Livestock Extension Services (Section 29.1)

Adopted (Col 3): This is the uptake of an intervention for 2 or more years

Livestock Extension Service providers (Section 29.2)

Contact Farmer: A farmer who is used by the extension services as a focal point to demonstrate new interventions to. The contact farmer then passes on the message to other farmers

Adopted (Col 5): This is the uptake of an intervention for 2 or more years

Working area for page 18

31.0 LABOUR USE				32.0 SUBSISTENCE vs NON-SUBSISTENCE																																																					
31.1 Who is mainly responsible for undertaking the following tasks:				32.1 Indicate if any members of the household was involved in the following activities and assess the percentage used for subsistence/consumption by the household:																																																					
S/N	Activity	Tick if carried out by hh	Main responsibility	S/N	Activity	Tick if hh was involved in activity	Estimate % used for subsistence	Estimate % used for non subsistence	Check Total																																																
	(1)	(2)	(3)		(1)	(2)	(3)	(4)	(5)																																																
31.1.1	Land Clearing	<input type="checkbox"/>	<input type="checkbox"/>	32.1.1	Crop production	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.2	Soil preparation (by hand)	<input type="checkbox"/>	<input type="checkbox"/>	32.1.2	Livestock production	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.3	Soil preparation (oxen/tractor)	<input type="checkbox"/>	<input type="checkbox"/>	32.1.3	Vegetable production	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.4	Planting	<input type="checkbox"/>	<input type="checkbox"/>	32.1.4	Tree cutting for firewood	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.5	Weeding	<input type="checkbox"/>	<input type="checkbox"/>	32.1.5	Tree logging for poles	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.6	Crop Protection	<input type="checkbox"/>	<input type="checkbox"/>	32.1.6	Tree logging for timber	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.7	Harvesting	<input type="checkbox"/>	<input type="checkbox"/>	32.1.7	Tree logging for charcoal	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.8	Crop processing	<input type="checkbox"/>	<input type="checkbox"/>	32.1.8	fishing	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.9	Crop marketing	<input type="checkbox"/>	<input type="checkbox"/>	32.1.9	bee keeping	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.10	Cattle rearing/husbandry	<input type="checkbox"/>	<input type="checkbox"/>	32.1.10	employment/off farm	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.11	Cattle herding	<input type="checkbox"/>	<input type="checkbox"/>	32.1.11	employment/off farm	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.12	Cattle marketing	<input type="checkbox"/>	<input type="checkbox"/>	32.1.12	Remittances	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																
31.1.13	Goat/sheep rearing/husbandry	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.14	Goat and sheep herding	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.15	Goat and sheep marketing	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.16	Milking	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.17	Pig rearing/husbandry	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.18	Poultry keeping	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.19	Collecting Water	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.20	Collecting Firewood	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.21	Pole cutting	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.22	Timber wood cutting	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.23	Building/maintaining house	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.24	Making Beer	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.25	Bee keeping	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.26	Fishing	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.27	Fish farming	<input type="checkbox"/>	<input type="checkbox"/>																																																						
31.1.28	Off-farm income generation	<input type="checkbox"/>	<input type="checkbox"/>																																																						
Responsibility (Col 3) HH head alone1 Girls6 Adult Males2 Boys & Girls7 Adult Females.....3 All household members.....8 Adults.....4 Hired labour9 boys 5				33.0 ACCESS TO INFRASTRUCTURE & OTHER SERVICES																																																					
				<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>S/N</th> <th>Type of service</th> <th>Distance in Km</th> <th>S/N</th> <th>Type of service</th> <th>Distance in Km</th> </tr> <tr> <td></td> <td>(1)</td> <td>(2)</td> <td></td> <td>(1)</td> <td>(2)</td> </tr> </thead> <tbody> <tr><td>33.1</td><td>Primary School</td><td><input type="text"/></td><td>32.7</td><td>Feeder Road</td><td><input type="text"/></td></tr> <tr><td>33.2</td><td>Secondary School</td><td><input type="text"/></td><td>32.8</td><td>All weather road</td><td><input type="text"/></td></tr> <tr><td>33.3</td><td>Health Clinic</td><td><input type="text"/></td><td>32.9</td><td>Tarmac road</td><td><input type="text"/></td></tr> <tr><td>33.4</td><td>Hospital</td><td><input type="text"/></td><td>32.10</td><td>Primary market</td><td><input type="text"/></td></tr> <tr><td>33.5</td><td>District Capital</td><td><input type="text"/></td><td>32.11</td><td>Secondary market</td><td><input type="text"/></td></tr> <tr><td>33.6</td><td>Regional Capital</td><td><input type="text"/></td><td>32.12</td><td>Tertiary market</td><td><input type="text"/></td></tr> </tbody> </table>						S/N	Type of service	Distance in Km	S/N	Type of service	Distance in Km		(1)	(2)		(1)	(2)	33.1	Primary School	<input type="text"/>	32.7	Feeder Road	<input type="text"/>	33.2	Secondary School	<input type="text"/>	32.8	All weather road	<input type="text"/>	33.3	Health Clinic	<input type="text"/>	32.9	Tarmac road	<input type="text"/>	33.4	Hospital	<input type="text"/>	32.10	Primary market	<input type="text"/>	33.5	District Capital	<input type="text"/>	32.11	Secondary market	<input type="text"/>	33.6	Regional Capital	<input type="text"/>	32.12	Tertiary market	<input type="text"/>
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33.18	Livestock Dev Centre	<input type="text"/>	<input type="text"/>	<input type="text"/>																																																					
Satisfied with service (Col 4) Very good1 Average.....3 No good5 Good2 Poor4 Not applicable 9																																																									

Definition and working page for page 19**Question specific definitions (Section 31.1)****Activity (Col 1):**

Land Clearing: Refers to removing trees/bush/grass prior to ploughing

Soil Preparation: Refers to the seedbed preparation (ploughing, harrowing, etc).

Cattle Rearing: Tending to cattle at home, eg assisting with births, castration, etc. Different livestock keeping activity to herding.

Cattle Herding: Moving livestock from place to place for grazing and water. If herding is carried out the respondent must also give a response to rearing/husbandry

Question Specific Definitions (Section 32.0.0)**Activity (Col 1):**

Subsistence: For the family's survival, rather than for the generation of cash. This includes feeding the hh, provision of water and fuel for cooking. The source of these products are usually from the land resources available to the family. Remember that not all cash earnings are for non subsistence purposes/activities as cash can be used to purchase subsistence items eg food.

Non -subsistence: Cash used for items and activities which are not crucial for the survival of the family. This includes modern medication, non working clothes, refined beer, school fees, etc.

Procedures for (Section 31.1)**Section 31.1 ((Labour use)**

1. For each listed activity in column 1, place a tick in column 2 if any member of the household was involved in that activity during the 2002/03 agriculture year.
2. After completing column 2 return to the first activity in row 27.1.1 and complete column 3.
3. Make sure you stress MAINLY responsible.

NOTE: If an activity has been mentioned previously in the questionnaire eg that the hh keeps chickens, make sure a response is obtained in the appropriate place ie poultry keeping.

If off-farm income generation is mentioned, check for responses to off farm income in other parts of the questionnaire

Section 32.0 - Subsistence vs Non-subsistence

1. For each listed activity in column 1, place a tick in column 2 if any member of the household was involved in that activity during the 2002/03 agriculture year.
2. After completing column 2 return to the first activity in row 32.1.1 and complete column 3 & 4. For each activity make an assessment of the percentage used for subsistence survival and the percent converted to cash for non subsistence goods and items.
3. Make sure you stress MAINLY responsible.

NOTE: Cross check the responses with previous sections in the questionnaire. eg if a response is given to remittances check for an entry in question 2.2.5

34.0 HOUSEHOLD FACILITIES																																							
34.1 House Construction For the main dwelling , what are the main building materials used in the construction of the following 34.1.1: Roof <input type="checkbox"/> 34.1.2 Number of rooms <input type="checkbox"/> <input type="checkbox"/>	34.2 Household assets Does your household own the following? <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;">Asset</th> <th style="width: 20%;">Y=1 N=2</th> </tr> </thead> <tbody> <tr><td>34.2. Radio/cassette, music system)</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Telephone (landline)</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Telephone (mobile)</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Iron</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Wheelbarrow</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Bicycle</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Vehicle</td><td><input type="checkbox"/></td></tr> <tr><td>34.2. Television</td><td><input type="checkbox"/></td></tr> </tbody> </table>			Asset	Y=1 N=2	34.2. Radio/cassette, music system)	<input type="checkbox"/>	34.2. Telephone (landline)	<input type="checkbox"/>	34.2. Telephone (mobile)	<input type="checkbox"/>	34.2. Iron	<input type="checkbox"/>	34.2. Wheelbarrow	<input type="checkbox"/>	34.2. Bicycle	<input type="checkbox"/>	34.2. Vehicle	<input type="checkbox"/>	34.2. Television	<input type="checkbox"/>																		
Asset	Y=1 N=2																																						
34.2. Radio/cassette, music system)	<input type="checkbox"/>																																						
34.2. Telephone (landline)	<input type="checkbox"/>																																						
34.2. Telephone (mobile)	<input type="checkbox"/>																																						
34.2. Iron	<input type="checkbox"/>																																						
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Definition and working page for page 20**Household facilities (Section 34):****Number of rooms used for sleeping in the household (Q 34.1)**

Include sitting room, dining room, kitchen, etc if used for sleeping. It also includes rooms outside the main dwelling

A room is defined as a space which is separate from the rest of the building by a permanent wall or division. A building/house that is not divided into rooms is considered to have one room.

Household assets (Q 34.2): these assets must be functioning. Do not include if broken.

Access to drinking water (Q 34.4): If there is more than one source, use the one, which the hh uses most frequently.

Main source of hh cash income:

Activity that provides the hh with the most cash during 2002/03 agriculture year.

Average/maximum yields						Use this table to compare the yields calculated in sections 7.1, 7.2, and 7.3. They are STRICTLY to be used as guidelines only and the sole purpose is to assist in getting the correct area and harvest for each crop					
Crop Name	kg/ha		kg/acre		Crop Name	kg/ha		kg/acre			
	Average	Max	Average	Max		Average	Max	Average	Max		
11	Maize	1200	6250	486	2530	86	Cabbage			0	0
12	Paddy	700	4000	283	1619	87	Tomatoes			0	0
13	Sorghum	750	3500	304	1417	88	Spinach			0	0
14	Bulrush Millet	350	3000	142	1215	89	Carrot			0	0
15	Finger Millet	300	2500	121	1012	90	Chillies			0	0
16	Wheat	1200	4500	486	1822	91	Amaranths			0	0
17	Barley	1400	2300	567	931	92	Pumpkins			0	0
21	Cassava	3000	7000	1215	2834	93	Cucumber			0	0
22	Sweet Potato	600	8000	243	3239	94	Egg Plant			0	0
23	Irish potatoes	750	8500	304	3441	95	Water Mellon			0	0
24	Yams	4000	10000	1619	4049	96	Cauliflower			0	0
25	Cocoyams	2500	5000	1012	2024	52	Sisal	800	25000	324	10121
26	Onions			0	0	54	Coffee	500	100	202	40
27	Ginger			0	0	55	Tea	2500	10000	1012	4049
31	Beans	400	1300	162	526	56	Cacao	200	1000	81	405
32	Cowpeas	300	1750	121	709	57	Rubber	400	1400	162	567
33	Green gram			0	0	58	Wattle			0	0
34	Pigeon pea	600	2000	243	810	59	Kapok			0	0
35	Chick peas	500	1500	202	607	60	Sugar Cane	60000	150000	24291	60729
36	Bambara nut	600	4000	243	1619	61	Cardamom			0	0
41	Sunflower	600	1700	243	688	71	Banana	10000	50000	4049	20243
42	Simsim	300	1000	121	405	72	Avocado			0	0
43	Groundnut	600	4000	243	1619	73	Mangoes	10000	25000	4049	10121
47	Soyabeans	1300	2500	526	1012	74	Papaw	50000	70000	20243	28340
48	Caster seed	300	750	121	304	76	Orange	20000	40000	8097	16194
75	Pineapple	25000	60000	10121	24291	77	Grape fruit	30000	50000	12146	20243
50	Cotton	300	1500	121	607	78	Grapes	5000	30000	2024	12146
51	Tobacco	500	2000	202	810	79	Mandarin/tange	20000	40000	8097	16194
53	Pyrethrum			0	0	80	Guava	7000	35000	2834	14170
62	Jute	800	3500	324	1417	81	Plums			0	0
44	Palm Oil	1200	5000	486	2024	82	Apples			0	0
45	Coconut	2000	8000	810	3239	83	Pears			0	0
46	Cashewnut	9	60/tree	4	24	84	Pitches			0	0

Back Page Reference material

This page contains reference information that may be required to complete some of the questions in the questionnaire.

Weights and measures

1 hectare = 10,000 sq metres (100 x 100 metres)
 1 kilometre = 1000 metres
 1 acre = 4840 square yards (110 x 44 yards)

Conversions

1 hectare = 2.47 acres
 1 mile = 1.61 Kilometres

Kg equivalents

The following standards may be used as a guide to obtain kg if the reported unit is different. Only use these conversions if the respondent is unable to provide weights in kgs.

	Crop Name	Number of Kgs			
		Standard		Non-standard	
		Bag	Tin	Name	kgs
11	Maize	100	18	Rumbesi	140
12	Paddy	75	15		
13	Sorghum	100	18		
14	Bulrush Millet	100	18		
15	Finger Millet	120	20		
16	Wheat	75	15		
17	Barley	75	15		
21	Cassava	60	12		
22	Sweet Potatoe	80	16		
23	Irish potatoes	80	16		
24	Yams	80	16		
25	Cocoyams	80	16		
26	Onions	80	16		
27	Ginger	75	15		
31	Beans	100	20		
32	Cowpeas	100	20		
33	Green ram	100	20		
34	Pigeon pea	100	20		
35	Chick peas	100	20		
36	Bambara nut	100	20		
41	Sunflower	60	12		
42	Simsim	100	20		
43	Groundnut	50	10		
47	Soyabeans	100	20		
48	Caster seed	100	20		
75	Pineapple	90	18		
50	Cotton	50	10		
51	Tobacco	70	14		
53	Pyrethrum	60	12		
62	Jute	50	10		
44	Palm Oil	100			
45	Coconut	75			
46	Cashewnut	80			

	Crop Name	Number of Kgs			
		Standard		Non-standard	
		Bag	Tin	Name	kgs
86	Cabbage	50			
87	Tomatoes	90			
88	Spinach	45			
89	Carrot	110			
90	Chillies	85			
91	Amaranths	50			
92	Pumpkins	60			
93	Cucumber	80			
94	Egg Plant	70			
95	Water Mellon	80			
96	Cauliflower	50			
52	Sisal	130			
54	Coffee	55			
55	Tea	60			
56	Cacao	60			
57	Rubber				
58	Wattle	90			
59	Kapok				
60	Sugar Cane	120			
61	Cardamom	100			
71	Banana	120			
72	Avocado	140			
73	Mangoes	130			
74	Papaw	100			
76	Orange	130			
77	Grape fruit	120			
78	Grapes	80			
79	Mandarin/tange	110			
80	Guava	110			
81	Plums	110			
82	Apples	110			
83	Pears	110			
84	Pitches	110			

For official use only:

If a question has a query, an indication will be made by the supervisor/data entry controller on the front page of the questionnaire. This space is to note what and where the problem is, the action required to be taken and the responsible person to take follow up action.

Nature of the problem:

Action Required: National supervisor action

Field supervisor action

Overall Status: Does not affect overall integrity of the questionnaire.
 More data is required before it can be used

Discard and resample
 Discard as missing data